





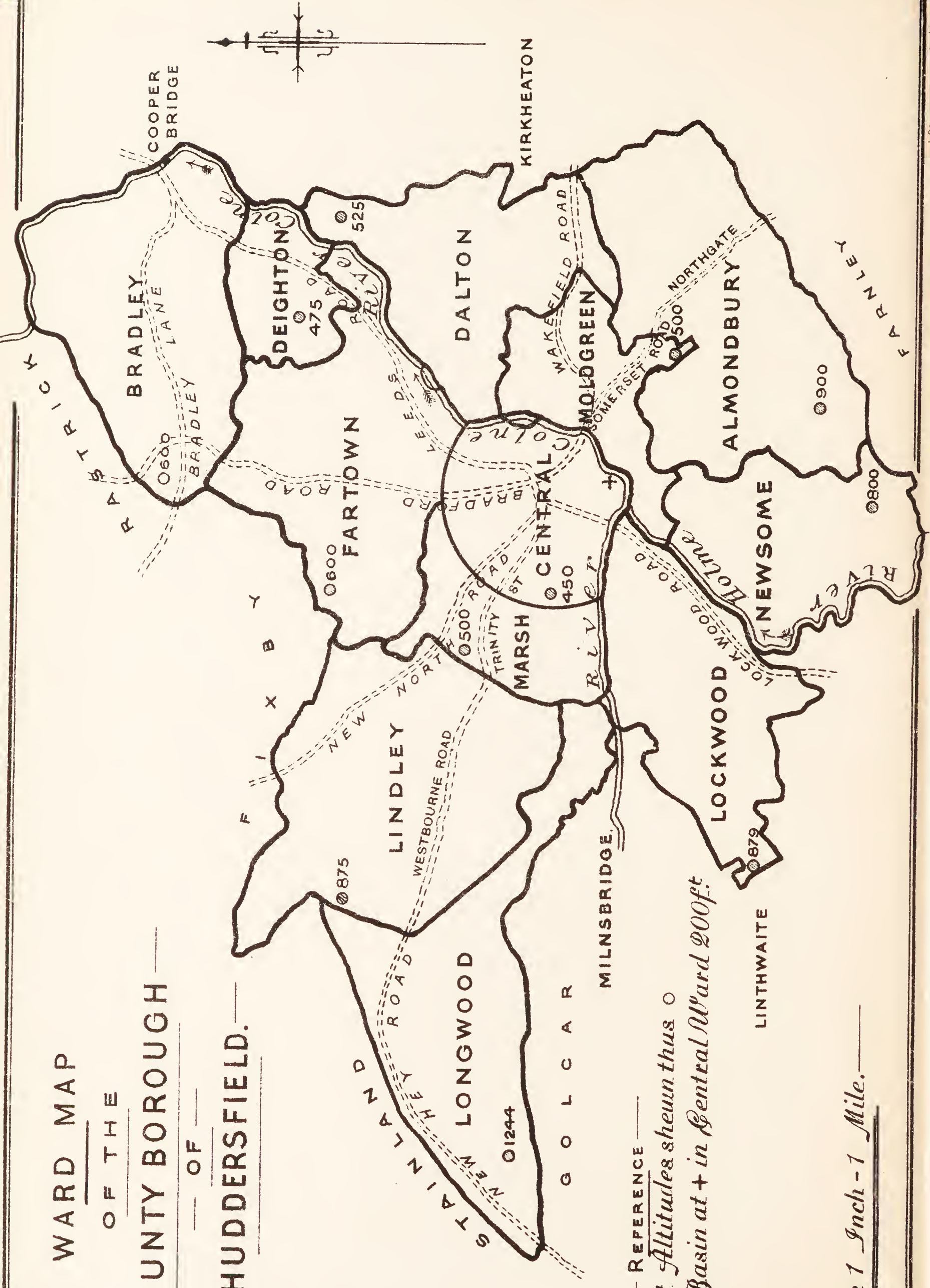
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WARD MAP OF THE COUNTY BOROUGH OF HUDDERSFIELD.



REFERENCE

Highest Altitudes shown thus ○
River Basin at + in Central Ward 200ft

Scale 1 Inch - 1 Mile.



THE
ANNUAL REPORT
MADE TO THE
URBAN SANITARY AUTHORITY
OF THE
COUNTY BOROUGH OF HUDDERSFIELD,
FOR THE YEAR
1894,

BY
JAMES ROBERT KAYE,
M.B., D.P.H., CAMB., F.C.S.,

*Medical Officer of Health to the Borough ;
Medical Officer to the Birkby Fever Hospital ;
Medical Officer to the Mill Hill Fever Hospital.*

PRINTED BY ORDER OF THE HEALTH AND SANITARY COMMITTEES

HUDDERSFIELD :
GEORGE WHITEHEAD AND SONS, PRINTERS, NEW STREET.

COMMITTEES.

Health.

JOHN JOSHUA BROOK, Esq., Mayor, and 20 Members.

Mr. Alderman W. H. JESSOP, Chairman.

Mr. Councillor B. BROADBENT, Deputy-Chairman.

Aldermen :

J. F. Brigg | G. Brook | J. L. Walker

Councillors .

J. Addy	J. Marshall
J. H. Aston	F. Marsland
F. A. Barras	J. Moorhouse
E. A. Beaumont	G. Moxon
J. Hirst	H. Roebuck
J. A. Hopkinson	H. Pullon
F. H. Johnson	J. L. Sykes
S. Kendall	

Duties and Powers of the Health Committee.

To execute and perform in the name and on behalf of the Council, but subject to the Standing Orders of the Council and to confirmation by the Council, all the powers and duties of the Corporation in relation to the following :—

- Main Intercepting Sewers and Sewage Disposal Works.
- Agreements with other Authorities as to disposal of Sewage.
- Cleansing of Sewers in Central District.
- Storm Overflow Sewers in the Central District.
- Infectious and Epidemic Diseases.
- Hospitals for Infectious Diseases.
- Common Lodging Houses.
- Cleansing of Infected Houses.
- Prevention of Pollution of Rivers and Streams.
- Health Statistics and Sickness and Mortality Returns.
- Superintendence of the Department of the Medical Officer of Health (in conjunction with the Sanitary Committee).
- Property of Corporation at Deighton, adjoining Sewage Disposal Works.

Sanitary.

JOHN JOSHUA BROOK, Esq., Mayor, and 20 Members.

Mr. Councillor JORDAN, Chairman.

Mr. Councillor J. FIRTH, Deputy-Chairman.

Aldermen :

G. Brook, A. Haigh, R. Hirst, W. H. Jessop, and J. Taylor.

Councillors :

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J. Briggs	C. Moon
B. Broadbent	J. Moorhouse
F. Crosland	O. Oxley
J. Crosland	E. Woodhead
A. Gee	E. B. Woodhead
J. Holroyd	

Duties and Powers of the Sanitary Committee.

To execute and perform in the name and on behalf of the Council, but subject to the Standing Orders of the Council and to confirmation by the Council, all the powers and duties of the Corporation in relation to the following :—

- Scavenging of Streets.
- Removal and disposal of Nightsoil and Refuse.
- Public Urinals and Conveniences.
- Nuisances.
- Offensive Trades.
- Control of Drains, Privies, Ashpits, and Cesspools.
- Buildings and rooms unfit for habitation.
- Polluted Wells.
- Adulteration of Food and Drugs.
- Unwholesome Food.
- Cowsheds, Dairies and Milkshops.
- Canal Boats.
- Factories and Workshops.
- Superintendence of the Department of the Medical Officer of Health (in conjunction with the Health Committee).

COUNTY BOROUGH OF HUDDERSFIELD.

Medical Officer of Health's Department,
1894.

Medical Officer of Health :

JAMES ROBT. KAYE, M.B., C.M., D.P.H.

District Inspectors of Nuisances :

WM. M. DRAKE. THOMAS WHITELEY.
BEN HAIGH.

Removal Officer :

MILTON TURNER.

Statistical Clerk :

TOM V. HAIGH.

Scavenging Superintendent :

JAMES JACKSON,
ASSISTED BY THREE FOREMEN.

Hospital Medical Superintendent :

JAMES R. KAYE, M.O.H.

Matron :

MRS. CRUMP.

Meteorological Records by MR. JOE FIRTH.

STATISTICAL SUMMARY.

Situation—Latitude, $53^{\circ} 39' 7''$ N. ; Longitude, $1^{\circ} 47' 30''$ W.

Elevation of the area built over—Varies from 200 feet to 600 feet above ordinance data.

Area of the Borough—11,852 acres ; of the Central District, 734 acres.

Density of Population—For the Borough, 8·3 persons per acre ; for the Central District, 36.

No. of Inhabited Houses—At Census (April) 1891, 20,930.

Population—(1891) 95,422 ; Estimated at the middle of 1894, 98,511.

Birth Rate—20·25 per 1,000.

Death Rates—Recorded, 15·92 per 1,000.

„ Zymotic, seven commoner Infectious Diseases, 1·52.

„ Infantile Mortality, 160 per 1,000 births.

„ Diseases of the Respiratory Organs, 4·65.

Mean Annual Temperature—47·6 degrees.

Total Rainfall—39·6 inches.

GENTLEMEN,

Herewith I present my Annual Report for the year 1894, which contains information with regard to the Vital Statistics of the Borough : a comparison of the various Wards, and with the large towns of the country. It also refers to the incidence of disease, and the means for its prevention. In the latter part of the report, an account is given of the work done by the Department. We have kept in view the extension of sanitary work on broad and rational lines, and have not confined ourselves exclusively to the effects of improved drainage. Preventable diseases have not so much their origin in pipes or drains, or even in flaring sanitary evils, as in the home, the workshop, and in the customs and habits of the industrial classes. We have attempted to improve the social customs of some particular localities by frequent inspections and conversations with the people, but ignorance of the most elementary sanitary laws hampers our work at every turn. The extension of technical instruction to popular lectures on Hygiene would be appreciated by the people, and in addition, would be a valuable aid to sanitary administration.

I am pleased to report that, for the third year in succession, the death-rate has been the lowest recorded since the incorporation of the Borough. In 1892, the total death rate was 18·14 ; in 1893, 17·4, and in 1894, 15·92 per 1,000 of the population. These gratifying results are largely the reward of wise sanitary work, but corporate action is not limitless, and much may be ascribed to favorable atmospheric conditions. To obtain the fullest benefit of these conditions, our sanitation must be maintained and improved, and the individual ratepayer can do something towards this, particularly by utilizing the kitchen fire as a cremator of all

combustible matter, and thus reducing to a large extent the decomposable refuse found in ashpits.

There has been no serious epidemic of any kind. The question of the erection of a new Hospital for Infectious Diseases, which has now been driven from pillar to post during the last ten years, has been advanced a stage. Plans have been selected from the 145 designs sent in for competition, and the early settlement of the question by the erection of a building worthy of the town is, I hope, within measurable distance.

In conclusion, I have again to thank the Chairmen and Members of the Health and Sanitary Committees for their continued kindness and generous support, and the officers and staff for their willing and hearty co-operation.

I desire most gratefully to acknowledge the cordial assistance the Department has received from my professional colleagues throughout the Borough and neighbourhood.

I am, Gentlemen,

Yours faithfully,

JAMES R. KAYE.

HEALTH OFFICE,

APRIL, 1895.

REPORT, 1894.

The attached sketch at the beginning of the Report will facilitate the study of the wards of the Borough. It exhibits the Wards into which the Borough is divided, and in each Ward the highest point of elevation is indicated by a round spot with the altitude in figures printed alongside. For the comparison of the altitudes, the bed of the River Colne might be taken, which at its entrance into the Borough from Linthwaite may be stated to be about 250 feet above sea level, whilst $1\frac{1}{2}$ miles down stream in the Central District it is 200 feet, and $3\frac{1}{2}$ miles further down at Cooper Bridge 172 feet. The highest point in the Borough will be found in the Longwood district, and the lowest at the Borough boundary, Cooper Bridge, so that it will be seen the contour of the Borough lends itself to arterial drainage. In the sketch is also exhibited the main highways intersecting the various Wards.

The area of the County Borough of Huddersfield is reckoned at 11,852 acres, which is made up thus:—

Township.	Area (Statute Acres.)				Population 1894.
Huddersfield	...	4055	...	...	47264
Almondbury	...	2636	...	...	15220
Dalton	1341	...	...	... 8811
Lockwood	994	...	...	12504
Lindley	1492	...	...	... 8965
Longwood...	...	1332	...	...	... 5747

From these figures an idea can be obtained of the number of persons to each acre. The actual density of the population is important. According to these figures the mean density of the population in the Borough is 8·3 persons per acre, but this does not express correctly the actual condition of density, because the population is unevenly distributed as exhibited in the above Table,

so that in the six townships which form the Borough the density varies from 4·3 in Longwood, 5·8 in Almondbury, 6 in Lindley, and 6·6 in Dalton, to 11·6 in the Huddersfield township, and 12·6 in Lockwood, and if the Central Wards of the Huddersfield township are taken by themselves then their density per acre increases to 36.

The population of the County Borough of Huddersfield has been estimated by the Registrar General to be 98,511 to the middle of the year 1894, that is to say an increase of 959 persons on the population of the previous year. In 1891 the estimated population at the middle of the year was 95,656 so that the increase calculated officially since then has been 2,855 persons, while the natural increase amounted only to 1,563, leaving 1,292 to be accounted for by the excess of immigration over emigration. It is upon the official estimate of 98,511 that the birth-rates and death-rates at all ages are calculated.

Health of Districts.

In the following tabular statement a comparison has been drawn of the mortalities from all causes; the seven commoner infective diseases; disorders of the respiratory organs; and fatality in those under one year of age in the various Wards of the Borough, and these death-rates have also been compared with corresponding death-rates of the previous decade divided into two five-year periods.

I propose to deal very briefly with these figures referring to each Ward, except in the case of Longwood into which I have entered somewhat in detail.

The total death-rate in all the Wards has participated in the general improvement, being most marked in the Central, Fartown, and Lindley. With regard to the seven infectious diseases a lessened death-rate is recorded, and this is also general throughout the districts. In considering the fatality from diseases of the Respiratory Organs it must not be forgotten that the year 1894 was specially favourable to a low death-rate, and hence the general

comparison as shewn in the table is very satisfactory, but if we glance along the figures of the two five-year periods only, they are not so gratifying.

In the Central, Fartown, Deighton, and Dalton districts the rates of 1888-1893 exceed these of 1884-1888, but taking the death-rate for the whole borough, the rate has been practically the same during both periods.

Less satisfactory are the results as regards infantile mortality during these two periods. An increase is noted in Marsh, Deighton, Dalton, and Almondbury, yet the rate shows an improvement of three per 1000 births on the former quinquennium.

The general impression to be obtained from the table is that considering the all-round improvement in the general death-rate, and zymotic death-rate, the stationary condition, or slight improvement in the mortality from diseases of the respiratory organs, and from infantile diseases is not satisfactory, and with the view of attempting something to reduce these rates, a special investigation has been made into each death, and the information obtained entered in our records.

It is apparent from a study of the table that no district presents an excessive mortality over the average of the Borough.

1894	Central			Marsh			Fartown			Deighton and Bradley			Dalton				
Population.	26445			8330			9833			2366			8811				
All causes per 1000 living	14.27			16.30			11.53			14.84			16.63				
Seven Infectious Diseases per 1000	1.18			1.40			1.12			1.27			1.82				
Consumption and Disease of Lungs per 1000		2.59		5.79			3.16			2.97			4.23				
Mortality under one year of age per 1000 births.....			142			165			135			187			212		
Same death rates in averages of five years—																	
1889-1893.....	16.68	1.34	6.52	161	16.75	2.07	5.10	161	178	15.86	1.37	4.98	133	17.69	1.39	6.92	176
1884-1888.....	19.57	1.73	5.86	181	16.64	1.43	5.45	152	168	15.04	1.10	3.10	84	17.10	1.87	5.37	165

1894	Almondbury	Lockwood	Lindley	Longwood	Whole Borough
Population.	15220	12504	8965	5747	98511
All causes per 1000 living	15.10	16.05	12.31	13.27	15.92
Seven Infectious Diseases per 1000	1.52	1.85	0.56	1.22	1.52
Consumption and Disease of Lungs per 1000	5.53	5.62	3.83	2.27	3.78
Mortality under one year of age per 1000 births.....	168	170	150	162	160
Same death rates in averages of five years—				3 years only.	
1889-1893.....	17.74 1.45 5.75 172	18.08 1.85 5.78 153	15.26 1.21 4.62 143	16.38 1.59 5.36 177	19.23 1.71 6.25 163
1884-1888.....	18.69 1.86 6.00 155	19.51 2.00 6.00 184	15.78 2.11 5.59 184		20.13 1.95 6.24 166

The district of Longwood was annexed to the Borough in November, 1890. Topographically it has been likened to the snout of a pig, while the other portion of the head is represented by the remaining portion of the Borough, and this is apparent in the sketch map at the beginning of the report. The area of this district is 1334 acres peopled by a population estimated at 5745 persons in the middle of the year 1894, residing in 1233 houses. At the time of annexation Longwood was stated to be composed of a population of 5900, but in the year following when the census was taken it was found that the population had been over-estimated by nearly 500. Here is another instance of the every day regret that we have not accurate data to work with in the long interval between the official censuses. This error was probably the result of several causes, first a rapid and continuous fall in the birth-rate. In 1885 the birth-rate was 30 per 1000 while in 1890 it had fallen to 23·56 and in 1891 to 21 per 1000, that is to say a decline of 27 per cent. in the number of births during the interval of the 6 years. The second cause leading to the over-estimated population was the high death-rate in 1886 and 1887 which diminished the excess of births over deaths to 37 in the former and 25 in the latter year. The third cause might be ascribed to the excess of emigration over immigration. The district is rural in character, although the trade is principally manufacturing; a number of the inhabitants being occupied as mill workers in other districts.

The Township of Longwood may be stated to include three distinct hamlets, Longwood proper, Outlane, and Nettleton Hill. It is to the first of these I propose to confine my remarks in this report. This portion of the Borough comprises about 800 houses which stand on the escarpment on the northern side of the valley in a direction from North-west to South-east. Longwood proper is therefore fully exposed to the West and South-west winds, and these are the prevailing winds in this neighbourhood. To the North the township is sheltered to some extent by the rocks, known as Longwood Edge, which rise to a height of over 800 feet above sea level, while the average elevation of the village proper will be about 600 feet.

In the bottom of the valley runs the brook, or rather "the open sewer" for the districts upstream and outside the Borough, because only a small portion of the brook runs in the Longwood district.

The geology of the district varies. The sub-soil is generally of a light sandy nature, and not of much depth. In many places the under-lying stratum of sandstone appears on the surface and a large number of the houses stand upon the rocks. In the lower part of the district about Milnsbridge the sub-soil is clay, and even in the higher portion of Outlane which it is not intended to refer to in this report the sub-soil there is clay, causing the ground to be very damp, so much so that in a house to house inspection of 43 cellars no less than 20 were found to contain water after rain or the melting of snow, but in Longwood proper the physical conditions are favourable for natural drainage, and for artificial drainage if properly constructed, but where little thought has been given to drainage, either for sub-soil water or sewage, then there comes some qualifications to its suitability. The lowest houses receive around their foundations the polluted surface washings from higher premises rendering the cellars damp, and a large number of them either contain or have contained water wells.

The following figures in tabular form show several of the more important rates by which the health condition of the district may be judged. The figures at my disposal extend back to the year 1885, five years prior to the annexation of the district, and the rates have been calculated on a re-adjusted population to overcome the excess already noted.

This Table shows the population, the deaths and death-rates from all causes, from Zymotic disease and Pulmonary disease, it also shows the number of births with the birth-rate for each year, the number of deaths under 1, and the ratio in proportion to 1000 births.

Year.	Population.	Deaths.	Death Rate.	Zymotic Death Rate.	Pulmonary Death Rate.	Deaths under one.	Infantile Mortality per 1000 births.	Births.	Birth Rate
1894	5747	76	13.28	1.22	2.27	17	162	105	18.33
1893	5724	99	17.35	2.63	5.96	20	163	123	20.56
1892	5664	67	11.87	0.35	3.72	19	139	136	24.09
1891	5445	112	19.91	1.78	6.40	27	229	118	20.97
1890	5329	77	14.50	.56		16	115	139	21.17
1889	5255	77	14.70	.76	No figures available.	20	127	157	29.98
1888	5181	91	17.62	.92		21	136	154	17.62
1887	5107	133	26.33	3.82		27	171	158	30.05
1886	5038	110	21.91	1.94		23	156	147	29.28
1885	4960	82	16.59	1.02		34	210	162	32.77
1881	4668								

Speaking generally it will be noticed that there has been an all-round improvement in the mortality since 1885. In the last column it is interesting to note the remarkable fall in the birth-rate. If we include the whole of the year 1890 in the statutes of the Borough, we find the mean death-rate of the five-year period 1890-94 to have been 15.38 per 1000, while for the five years period before annexation the mean death-rate had been 19.43 per 1000 inhabitants.

Houses.

Considering how much public health is influenced by the manner in which the people are housed, it will be generally admitted that to advance in the Sanitary improvement in the dwellings is worthy of the best efforts of a Sanitary Authority.

Seven hundred houses have been examined, of these 505 are through-houses while 195 may be described as back-to-back, that is to say nearly 4 per cent. of the total. These back-to-back houses are scattered throughout the district. In Lower Gate there are 74 of these houses to 20 with through-ventilation, in Longwood Road 61 of the former to 28 of the latter, but in Longwood Gate the whole of the houses 142 in number are what are known as through-houses.

Many of the houses are practically built upon the soil with no ventilating area below, and there has been no attempt to remedy this insanitary condition by the introduction of damp course. In the building of the houses measures for the prevention of damp walls have been totally ignored, some of the houses belong to what have been termed the "Salt Pie Class." There are no windows or doors behind, the houses having been built in a hole excavated in the soil, with the back wall built close up to the sides of the excavation. In some houses the coal cellar and keeping cellar, which receive their only light from a doorway leading into the kitchen or dwelling room, are situate between the back wall and the dwelling room. In our investigations we have noted numerous examples which might be interesting and which I intended to enter in this report, but found the matter far too lengthy, so that we may here summarize the chief causes which tend to make these houses unhealthy, and by lowering the general physical condition of the inmates, render them more prone to sickness of one kind or another.

1st, Sanitary defects; 2nd, Dampness and wet sub-soil; 3rd, Insufficiency of air space, deficiency of light and sunshine.

The first refers to drainage and the necessity of a perfect system. It is generally agreed that by far the most important conditions affecting the health of the individual are those connected with his house.

Defects in drainage with the consequent soil pollution and well-water contamination are probably the quickest to produce visible effects upon health. To the second class we might refer defective construction of the foundations, walls, and roofs, and these aided by the third are looked upon as tending to lung and other diseases. Inflammation of the Lungs, Consumption and Rheumatism. With regard to the third order of defects, the injurious influence upon health is self-evident. The three conditions above described are certainly injurious to health, thereby thwarting the aim of all Sanitary reform which is the prevention of preventable sickness and premature death. The more obvious insanitary conditions have been attended to, and wholly or partly remedied, but

difficulties obstruct radical reform, and innumerable examples of insanitary conditions still exist, and I will refer to them in a general way.

Drainage.

It is agreed amongst competent authorities that proper drainage is the primary and most effective step of all Sanitary progress, and still one frequently hears "these drains have done for our forefathers, and they lived long enough" probably true, but our forefathers did not possess the water carriage system with its many benefits and few drawbacks. For the most part their drains were simply water drains which now prove so perplexing to us. Whenever there is a congregation of houses the disposal of foul water becomes a question of vital importance to the community. The polluted water and putrifying liquids produced in the dwelling should be as speedily as possible run off to a sufficient distance to preserve the healthiness of the premises, and such obnoxious matter should on no account be allowed to stagnate near human habitations. There cannot be any doubt that the unsatisfactory condition of the district as regards drainage has arisen through want of arterial sewers; this has afforded an excuse to owners to delay the proper drainage of their property, and also to rectify what has been left in its primitive condition. The want of drainage has also delayed the abolition of privies and cesspools which destroy the purity of the soil. In the removal of fæcal matter the cleanest method is to resort to the water carriage system. If one of the other systems such as the pail or earth closet is used then the cost of cleansing is very great and necessitates much manual labour, while a system of drains is necessary for the foul waters of the kitchen, but proper drainage fulfils a two-fold duty, first the removal of foul liquids, second the removal of the next great sanitary evil, viz:—the storage amongst dwellings of the excreta of the inhabitants. To be brief a large portion of the district may be said to be devoid of efficient sewerage, for the stone sewers that are in existence are probably as harmful as the open drainage so evident in various parts of the district.

The sewage meanders over the floor of these sewers, and in the summer-time the sewage must be in a state of decomposition, and

emit injurious gases. The want of main sewerage has baulked us in many of our contemplated improvements, but this obstacle seems in a satisfactory way of being overcome at an early date, as the intercepting sewer is now being laid in the district. The drainage of individual houses has been improved, but much still remains to be accomplished in this way. In our survey 37 per cent. of the houses were found to be badly drained, stone wall drains being common without any provision for cutting off the drain smells from the houses. Of the premises inspected 313 discharge their drainage into stone walled sewers while 339 find an out-let in cess pools or run upon the fields in a rudimentary irrigation fashion. A large proportion of the Longwood sewage ultimately finds its way into Longwood Brook, already referred to as an open sewer.

Disposal of Excreta.

The midden privies are common, and to increase the danger arising from these nuisances their position is generally at a higher level than the floor of the houses. Further, the floor of the privy is usually sunk in the ground and admirably adopted for the soaking of liquid sewage to the foundations of the houses, and if in the neighbourhood of well-drinking water probably to its contamination. From some of the privies the Scavengers are unable to empty the contents until mixed with shoddy or flue dust. Of the 700 houses visited 252 were accommodated with middens, 74 with dry ash-places, 144 with excreta tubs, and 28 with water closets. Some remarks might be added regarding the ash-places, which are too frequently considered in regard to the question of cost and cleansing rather than sources of disease, such as Enteric Fever, but a number have been remedied by being covered in and the floor raised to the level of the surrounding ground.

Sub-Soil Drainage.

A large proportion of the houses in the Longwood district are visibly affected by dampness, which reaches a foot or so above ground. The material of the walls absorbs the moisture in the

ground, and too frequently the roof washings from the eaves or the surface water from the roofs of neighbouring houses and from the yards. This dampness which is simply moisture drawn to the warm interior of the house cannot but be injurious to health, and is generally supposed to be the immediate cause of Diphtheria and sometimes Diarrhœa. Much of this dampness would be avoided by a damp course,—a remedy rarely employed in the Borough until in recent years. Purity of the air cannot be maintained in a house unless it be thoroughly dry. The air is liable to be rendered unwholesome from excess of moisture, 1st by absorption of water from the rock or soil below; and 2nd from the porous stone or bricks of which the building is constructed, and therefore the foundations of a house and the basement are really the most important parts of it as regards its sanitary condition. These are some of the injurious results of improper drainage, and therefore improvement is necessary, especially as means for purification of the sewage has been provided at the out-fall. There can be no doubt as to the utility of drainage, contributory and arterial, to the comfort of the people apart from its ultimate economic results.

Water Supply (Longwood).

Most of the houses in the Longwood district are provided with Corporation water which is principally supplied from the Longwood Reservoir, gathered from arable ground on the southern side of the valley and supplemented by the springs at Wessenden. This water is considered the best of the various supplies to the Borough. The absolute purity of a water supply is of the greatest importance, and is an essential element in the prevention of disease. There is far less chance of the contamination of a public water supply than there is where sub-soil or well-water is in use. It should be kept in memory that ordinary filtering will not purify water which has become impregnated with organic matter or infected material, and it is unsafe to say that because a well yields pure water to-day it may not become contaminated to-morrow, for there are many chance agents of pollution when these wells are situate in yards

and public highways adjoining groups of houses. The following table gives an analysis of the standard to which pure water should attain, and with this the analysis of the ordinary Huddersfield supply and of the Longwood supply in the other columns of the table may be compared. Analysis is also given in the next table of several waters taken from various wells in the district and these show contamination, some of them undoubtedly polluted with sewage, still well-water, and water derived from streamlets is consumed and used in the preparation of food. These waters in bye-gone times would probably be pure and wholesome to drink, but now the pollution of the soil from the house sewage, privies and dunghills near to houses, stables and piggeries have rendered some permanently unfit to drink, while others liable to intermittent contamination are equally dangerous to human life.

In several recent reports to the Medical Department of the Local Government Board, the following general conclusions may be adduced :—(1.) A definite and serious danger of Enteric Fever and allied diseases attaches to the use of well-water in neighbourhoods where the ground is polluted with excrement, drainage, or manure. (2.) Almost certain prevalence of these diseases if the specific contagion finds its way into the well through the discharges of sick patients being thrown on the ground or into a wet ash place, whereby the liquid penetrates through the ground. (3.) Such polluted well-water can impart its infection to vessels washed in it, and so to the milk they afterwards contain.

Where the population is increasing in density, and where the soil is composed of pervious material or faulty soft rock, then the only safeguard is to close the wells.

	Longwood Polluted Well Water			Corporation Water	Pure Water
	A Slightly turbid	B Clear, colourless	C Bright and clear		
Appearance in a 2 ft. tube				Bright and clear	Colourless
Smell, when heated to 100° F. ...	None	None	None	None	None
Chlorine as Chlorides	2.4	2.2	2.5	0.86	1.00
Nitrogen as Nitrates	1.4	1.19	2.1	0.10	0.01
Ammonia, free .....	.0200	None	None	0.00101	0.0014
„ albumenoid.....	.0180	.0031	.0021	0.00105	0.0035
Hardness	8.1°	6.5°	7.8°	3.2°	6.0°
„ after boiling	7.0°	6.5°	7.8°	3.2°	4.0°
Reaction	Neutral	Faintly alkaline	Neutral	Neutral	...
Total solids, dried at 212° F.	29.0	26.4	30.0	5.2	6.0
Sediment	Small amount	None	Small	None	None
Microscopical Examination of Sediment	Oxide of iron	...	Hairs dyed blue Various fibres Fungoid growth	...	No organic debris.

The results are given in grains per gallon.

A—Is polluted with sewage or drainage from cultivated land. **B**—Though not seriously polluted, shows evidence that it is unsafe for drinking. **C**—May be used at present, but is liable to pollution, and therefore unsafe for human consumption.

Longwood Brook (Pollution.)

Only a short distance of this brook is in the district of Longwood, by far the greater portion being in the neighbouring district of the Urban Authority of Golcar. It is seriously polluted, not only with trade refuse but with domestic sewage, and it is to be hoped the Rivers Board of the West Riding will be able very shortly to improve its condition. Of course there are difficulties, the subject is primarily a sanitary one, and secondarily a commercial or pecuniary one. As with other sanitary evils this involves serious consideration, and although we may not be too exacting, still to permit such a filthy water course in any district is to afflict a nuisance upon the people. It may be difficult to give figures, but still experience would say that such a stream defiled by sewage and trade refuse must have a detrimental effect upon those in its proximity, because evaporation of gases, as we see them bubbling from the surface is constantly going on, thereby polluting the atmosphere in the neighbourhood of the houses on the banks of the stream.

The conclusions deducible from the remarks above made are the following :—

(1). Sub-soil drainage should be required around all building sites.

(2). If the building is erected on the side of a hill, the incline of the ground should be cut away so as to allow free ventilation of air around the building, and the lowest level of the floor of a living room should be several feet above the level of the excavated plateau.

(3). The basement floor should always have a ventilating space under it unless the floor is protected by a layer of concrete on the ground.

(4). In the walls of the houses a damp course should be inserted a little above the ground level.

(5). Outside windows should be provided to all living rooms, and to all water closets and places where sinks are fixed.

(6). The whole of the drainage should as far as possible be kept outside the building and be properly ventilated.

(7). The privy system should be abolished, and the water carriage system introduced, but in some isolated places a properly constructed ash-closet might be permitted. Improvement of the unhealthy parts of the district can be attained by purification of the soil and air around the dwellings, by doing away with unhealthy accumulations and foul privy middens, but the action of the Corporation will be rendered less valuable and become unprofitable without habits of cleanliness, for many are daily throwing away their own health, and not only that, but they barter the life of their fellow-creature as though it belonged to themselves.

Marriages.

During the year 1894 the number of marriages solemnized in the Borough was 906, against 837 in 1893, 839 in 1892, and 878 in 1891. The average yearly number of marriages during the period 1881 to 1890 has been 847.

Births.

During the 52 weeks ended December the 29th, 1894, there were registered in the Borough according to the returns furnished by the district registrars 1,988 births, against 2,311 in 1893, a decrease of 323 births in the year under notice.

The subjoined Table shows the quarterly number of births of males and females.

1894.	Males.	Females.	Totals.	Birth-rate.
1st Quarter.	265	285	550	22·41
2nd „	245	199	444	18·09
3rd „	244	240	484	19·72
4th „	260	250	510	20·78
Totals...	1014	974	1988	20·25

Of the total births in 1894, 1,014 were males and 974 females. These figures correspond to a birth-rate of 20·25 per 1000 of the population, another well marked step in the progressive decline of

the birth-rate since 1878, when it was 35 per 1000 persons. I have in several Reports referred in detail to the abnormal decline in the birth-rate. During the 10 years 1883 to 1892 the mean birth-rate was 26·20 per 1000, which means that if this average had been maintained during 1894, then, 588 births more would have been registered during the year than there really were; again if we had maintained a birth-rate equal to that of the 33 large towns (30·75) then 985 births more would have been added, increasing materially the natural increment of our population, whereas even with their low death-rate the increase of population is small.

The nearest approach to our own birth-rate occurred in Halifax, where 23·1 per 1000 were registered; amongst the other large towns the birth-rate ranged from 25 in Croydon, 25·8 in Brighton, 26·7 in Bradford, 35·1 in Sunderland, and 35·4 in Liverpool.

The effect of the decline in our natural increment will ultimately result in a population favourable to an increased death-rate, because the age constitution of the population will become an advanced one. The following Table displays the age constitution in the two census years 1881, 1891.

Period. Census.	Persons.	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards
1881	81,841	Male	38,957	1125	4032	9043	7501	1235
		Female	42,884	1046	4090	9203	8990	1534
		Totals	81,841	2171	8122	18246	16491	2769
		Per cent.	2·65	9·92	22·29	20·15	41·56	3·38
1891	95,420	Male	44558	955	3596	9804	9446	1378
		Female	50862	938	3847	10246	11010	2056
		Totals	95420	1893	7443	20050	20456	3434
		Per cent.	2·00	7·80	21·01	21·44	44·17	3·60

An investigation into the decline of the birth-rate led me during the past year to make enquiries into the number of still-born children. This enquiry has been surrounded with difficulties owing to various reasons. In some Church Yards no record

is kept of the interment of still-born children, because the English law enacts that those children born alive shall only be registered. On the Continent registration of still-borns is provided for, with the exception of Russia, so that in this country so far advanced in all questions relating to the welfare of the public we should not lag behind in this matter. I am informed also that sometimes the bodies of still-born children are disposed of surreptitiously by the relations during the night time in the Burial Ground. In other cases a fee of one or two shillings is charged which goes to the Sexton, and no record of any kind whatever is kept, while in some instances the fee goes to the minister, and there a register is generally maintained. So far as I have been able to ascertain a yearly average of 119 interments of still-born children took place in five burying grounds, during the decade 1884-1893 in this Borough, that is to say six to eight per cent. of the total births or one to every fourteen living births. These proportions are much in the same ratio as reported by several investigators on this subject. From the figures at my disposal there is little if any ground to believe that there has been any apparent increase in the number of still-born children. To show the necessity of registration in those cases it has been brought to light in a parliamentary return for 1890 that no less than 17,335 supposed to be still-borns were interred in 1,133 burial board cemeteries, and of this number 4,569 were interred without any Medical Certificate as to the cause of still-birth.

With regard to the crime of the production of still-borns it is common information that the practice is frequent amongst women, especially married women. In this Borough during 1894 two cases of criminal abortion have been brought to light, and exemplary punishment inflicted. In how many instances might this practice have been prevented if the registration of still-born children were made compulsory, just as the registration of deaths has been since 1874. Under the present system there is every opportunity for the concealment of illegal means, and for the disposal of children as still-born, who had survived an hour or two, it may have been a day or so. Another point is that the practice is encouraged by lessened expense. A small gratuity covers the cost in the

interment of still-born children, while a funeral would cost several pounds, for this and other reasons the compulsory registration of still-born children should be enforced until a more perfect system has been formulated for the registration and inspection of all cases in which death has occurred without medical attendance.

Deaths.

The number of Deaths registered during 1894 at all ages and from all causes was 1,563, 819 males and 744 females, corresponding to an annual death-rate of 15·92 per 1000. The Registrar General makes it 15·8, this slight discrepancy is due to the fact that the Registrar General excludes all deaths occurring in Institutions amongst persons not resident in the Borough and includes deaths amongst those admitted from the Borough into Deanhouse Workhouse, while it has been the custom in this department to consider that the deaths amongst strangers in Institutions in the Borough, counterbalance those of residents in other Institutions such as the Workhouse and Asylum.

The smallest number of deaths in one week occurred during the week ended July 14th, when twenty deaths were registered, equal to an annual death-rate of 10·59, while the greatest weekly number of deaths were recorded in the 49th week ended December the 8th, when 50 deaths were registered equal to a death-rate of 26·48 per 1000.

The death rate for 1893 was 17·43 and the average for the last ten years has been 19·68 per 1000 of the population.

Table shewing number of deaths and death-rates according to sex for the five years 1890-1-2-3 & 4.

Year.	Number of Deaths.			Death Rates per 1000 persons.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
1890	980 ...	824 ...	1804	10·24 ...	8·60 ...	18·84
1891	1146 ...	1043 ...	2189	12·02 ...	10·94 ...	22·96
1892	897 ...	849 ...	1746	9·32 ...	8·82 ...	18·14
1893	893 ..	802 ...	1695	9·18 ...	8·25 ...	17·43
1894	819 ...	744 ...	1563	8·34 ...	7·58 ...	15·92

It will be observed that the number of deaths amongst females is lower than amongst males, but this is not so apparent during the later years of the table, and may be accounted for by the gradual increase of female labour, thereby exposing them to the dangers of employment and vicissitudes of weather.

(The comparison in the following Table of the 33 large Towns represents what might be considered as the mortality if the proportion of persons living in each town as to sex and age groups had been the same as in all of them.)

Towns.	Annual Rate per 1000 Living.			Deaths of Children under one year of age to 1,000 Births.	Rate per cent. of Uncertified Deaths.
	Births.	Deaths.	Principal Zymotic Diseases.		
33 Towns	30·7	18·1	2·4	152	1·7
London.....	30·1	17·8	2·7	143	0·8
West Ham	34·0	16·2	3·2	138	4·2
Croydon	25·0	13·2	1·5	121	—
Brighton	25·8	16·4	1·2	138	1·4
Portsmouth	27·6	15·2	2·0	131	0·8
Plymouth.....	28·8	18·3	1·6	169	1·2
Bristol	28·2	17·3	2·0	150	1·3
Cardiff	34·4	16·2	1·9	141	1·2
Swansea	32·3	17·0	1·8	163	1·1
Wolverhampton ...	34·1	20·7	3·2	166	0·7
Birmingham	31·7	18·6	2·5	163	5·1
Norwich	29·8	18·7	1·5	164	1·7
Leicester	31·5	14·7	1·9	162	3·1
Nottingham	28·6	17·2	2·3	174	1·3
Derby ..	29·3	15·0	1·6	123	0·7
Birkenhead	30·6	18·1	2·6	143	0·5
Liverpool.....	35·4	23·8	3·4	179	3·5
Bolton	31·5	18·8	1·8	162	0·9
Manchester	32·0	20·4	2·4	160	1·3
Salford.....	34·3	21·0	3·3	174	2·8
Oldham	27·2	18·6	1·8	161	0·8
Burnley	32·2	18·7	2·5	170	1·8
Blackburn	28·8	17·9	1·6	169	3·6
Preston.....	32·1	20·8	2·6	217	4·8
Huddersfield ...	20·2	15·8	1·4	160	3·4
Halifax.....	23·1	16·5	0·9	135	4·9
Bradford	26·7	17·0	1·8	145	0·9
Leeds	32·2	17·9	2·0	155	1·0
Sheffield	33·4	17·8	2·3	157	3·6
Hull	32·4	17·4	1·8	142	4·2
Sunderland	35·1	20·8	3·1	167	1·0
Gateshead ...	34·2	17·7	2·4	152	0·9
Newcastle-on-Tyne	31·0	18·3	2·2	157	1·0

From the above table which has been prepared in accordance with the figures of the Registrar General we shall see that our relative position amongst the large Towns is not so favourable as in 1893, still it is very creditable as far as the gross annual death-rate is concerned. It might be argued that we would be nearer a true statement if we used the corrected death-rate, but I consider that the abnormal decline of the birth-rate has impaired the value of the factor, while no consideration has been made on account of trade in arriving at the factor of correction, and therefore it is advisable to adhere to the death-rate which is the same rate as reported weekly by the Registrar General until we have obtained more reliable data from a quinquennial census.

The following table gives the annual death-rate per thousand of the population of the different districts, as taken from the Registrar General's Report :—

England and Wales	Population 30 millions...	16·6
„ Urban Districts	„ 20 $\frac{1}{4}$	„ 17·1
„ Rural „	„ 10	„ 15·6
Thirty-three large towns	„ 10 $\frac{1}{2}$	„ 18 1
Sixty-seven next „	„ 3 $\frac{1}{3}$	„ 16·0

Age Mortality.

The mortality of a town does not occur equally at all ages and experience shows that the death-rate is higher at the extremes of life, that is to say under five and over 55 years of age. In the last three Annual Reports the age mortality has been expressed as percentages of the total deaths, simply because the necessary information with regard to the various age groups was wanting. The result derived from the method of calculation by percentages though not satisfactory assists in verifying the conclusions obtained for estimating the mortality in proportion to the population at the various age periods.

DEATHS.		1st quarter	2nd quarter	3rd quarter	4th quarter	Total	Percent- age to Total Deaths.
Under 1 year of age	1894	96	68	55	99	318	20
	1893	75	77	96	77	325	19
	1892	90	100	60	86	336	19
Between 1—5	1894	45	44	38	57	184	11
	1893	51	53	34	57	195	12
	1892	66	73	57	51	247	14
Between 5—15	1894	23	26	15	19	83	5
	1893	18	18	21	23	80	5
	1892	25	18	11	17	71	4
Between 15—25	1894	25	28	23	25	101	6
	1893	26	30	16	30	102	6
	1892	25	24	24	23	96	5
Between 25—50	1894	94	65	78	78	315	20
	1893	97	76	83	89	345	20
	1892	90	86	84	73	333	19
Between 50—60	1894	45	41	44	35	165	10
	1893	51	53	49	46	199	12
	1892	57	48	29	49	183	10
Between 60—80	1894	110	90	68	88	356	22
	1893	109	100	88	93	390	23
	1892	148	86	79	102	415	24
80 and upwards	1894	11	13	5	12	41	2
	1893	17	13	13	16	59	3
	1892	18	15	16	16	65	4

The following Table gives the total Monthly and Yearly number of Deaths, both Male and Female, with the approximate average Age at death.

	Total Number of Deaths.			Approximate Average Age at Death.		
	Males.	Females.	Both Sexes.	Males.	Females.	Both Sexes.
January	93	103	196	31·70	40·46	36·08
February ...	61	76	137	32·55	36·13	34·34
March	66	50	116	34·56	27·11	30·83
April	62	44	106	30·32	37·89	34·10
May	75	87	162	29·32	32·30	30·81
June	63	44	107	38·42	41·17	39·79
July	48	52	100	30·17	33·66	31·91
August	77	55	132	30·97	35·95	33·46
September ...	57	37	94	37·51	32·28	34·89
October	90	78	168	28·10	36·36	32·23
November ...	60	44	104	30·45	32·39	31·42
December ...	67	74	141	27·08	29·92	28·50
Whole Year	819	744	1563	31·53	34·88	32·20

Infantile Mortality.

This refers to the deaths under one year of age. These deaths numbered 318 during the 52 weeks of 1894. As heretofore we express this rate in proportion to each 1000 births registered, which gives a rate of 160 against 141 in 1893, and 168 the average of the 10 years ending 1893. In the 33 large Towns the Infantile Mortality was 152 per 1000, so that we have reason to be dissatisfied with this loss of life, especially as our birth-rate is an exceedingly low one, and therefore should help in producing a low

Infantile Mortality, whereas during the last 10 years we have shown little or no improvement in this rate. In the table which displays a statement of the relative position of districts this mortality is also stated.

The following Table displays the various causes of death amongst children under one year of age in the various quarters of the year and according to sex.

1894.	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		Males	Females	Total
	M.	F.	M.	F.	M.	F.	M.	F.			
Measles (4), Diphtheria (4)...	...	...	5	...	1	...	1	1	7	1	8
Whooping Cough (31), Croup (1)	1	5	6	7	4	3	3	3	14	18	32
Diarrhœa (4) .....	...	1	...	...	1	1	1	...	2	2	4
Erysipelas (4), Syphilis (5).....	2	1	...	...	1	1	2	2	5	4	9
Tuberculosis (2).....	...	...	1	...	1	...	...	...	2	...	2
Tubercular Meningitis (4), Phthisis (2)	1	1	...	1	1	...	2	...	4	2	6
Premature Birth (39)	5	5	4	2	3	1	12	7	24	15	39
Congenital Malformations (12)	3	1	4	...	...	...	3	1	10	2	12
Meningitis (3) .....	...	1	...	...	...	...	1	1	1	2	3
Convulsions (28)	8	4	3	2	4	2	3	2	18	10	28
Bronchitis (50)	10	10	4	3	3	1	15	4	32	18	50
Pneumonia (24)	5	4	2	1	...	1	8	3	15	9	24
Dentition (6) .....	...	...	3	...	...	...	1	2	4	2	6
Dyspepsia (1), Gastritis (5)	1	...	...	1	3	...	...	1	4	2	6
Obstructive disease of Intestine (1) .....	...	...	1	...	...	...	...	...	1	...	1
Atrophy (2), Debility (17), Marasmus (23)	8	6	4	4	7	4	6	3	25	17	42
Inanition (9), Mal Nutrition (1)	2	...	2	1	3	...	2	...	9	1	10
Not specific or ill-defined (18)	3	5	1	2	...	2	4	1	8	10	18
Other Diseases (18)	3	...	2	2	2	5	1	3	8	10	18
	52	44	42	26	34	21	65	34	193	125	318
Total.....	96		68		55		99		318		

During the whole of the year an investigation has been carried on into every death which occurred in children who had not completed one year of existence. The 318 deaths occurred in 317 different families composed of 813 children. It will be noted that the average number of children per family (2·5) is lower than would have been expected. I do not propose entering into a detailed report upon this subject until we possess the figures for several years, but the following items are interesting.

Total Deaths under one.	Breast Fed.	Bottle Fed.	Breast & Bottle.	Spoon.	Only survived a short time.
318	102	64	69	20	63
Percentage	32	20	21·7	6·2	19·1

Perhaps it would be better to express these figures in another way, because in the above statement it would appear that the mortality was highest amongst the breast fed, or what we might term “naturally fed” children, whereas it was not so. If we add together the mortality amongst those fed by bottle, bottle and breast, and spoon, then the proportion rises to 48 per cent., as against 32 per cent. amongst the breast fed. These figures do not include the 19·1 per cent of children who survived only a short time.

In 44 cases (13·8 per cent.) only did the mother go out to work and 20 deaths (or 6·5 per cent.) occurred amongst illegitimate offspring. One hundred and three, 32 per cent., were insured.

The Classification of Death Causes.

All death causes are conveniently arranged under various headings, and the subjoined Table, a summary of Table VI. (Appendix) shows the death-rates per 1,000 living in the Borough, according to the Registrar General's classification of diseases.

	1894	1893	1892
1. Specific Febrile Diseases—			
Zymotic	1·52	1·38	1·53
Malarial	0·11	0·33	0·52
Venereal	0·05	0·07	0·41
Septic	0·13	0·14	0·12
2. Parasitic Diseases.....	...	...	...
3. Dietic Diseases	0·02	0·04	0·04
4. Constitutional Diseases.....	3·44	3·27	3·72
5. Developmental Diseases	1·29	1·30	1·14
6 Local Diseases—			
Nervous System	1·96	2·23	2·26
Circulatory „	1·24	1·26	1·44
Respiratory „	3·03	3·76	3·66
Digestive „	0·94	1·20	1·26
Urinary „	0·50	0·43	0·50
Reproductive „	0·12	0·09	0·10
Bones and Joints	0·04	0·07	0·08
Integumentary System ...	...	0·02	...
7. Violence	0·39	0·37	0·48
8. Ill-defined and not specified causes	1·13	1·42	1·24

This Table shows an all-round improvement upon the figures of 1892.

Infectious Disease.

There has been no epidemic of any proportions beyond localized outbreaks in the Borough during the year. Some facts as to the various diseases included in this class are cursorily stated below.

Small Pox.

Only five cases of this disease came to our knowledge, and all occurred in male patients. Three were from the Central District and each represented a fresh and distinct attack. The first was a wandering Tailor, the second a Lodging-house keeper who had been in the habit of sleeping in the same room with several of the lodgers; the third a young man who had come from a midland town to visit his friends and developed the disease three or four days after his arrival. The two cases in Dalton district occurred in the same house. The first case occurred in a young man aged 31, a painter by trade, but who had been roaming in other towns. On the 7th July he was at home and complained of pain in his back and the other symptoms characteristic of Small Pox, but no notice was taken of his illness until the 11th when the case was notified and immediately removed to the Small Pox Hospital. In the three first cases referred to all persons who had been in contact with the patients were re-vaccinated, but in the Dalton case the two occupants, besides the patient in the house refused to be re-vaccinated, as they considered it "quite ridiculous" to think that people over 60 years of age could catch the disease, but on the 21st July the uncle aged 62 was found to be suffering from an attack of the disease, and was immediately removed to the Hospital. So much has been said about this disease in former Reports that I need only give the following particulars. The ages of the patients were 43, 32, 31, 62 and 18 respectively. All of them it will be seen are above the age when re-vaccination is considered advisable. The severity of the disease and the detention in the Hospital was very largely settled by the conditions of vaccination.

Although the Small Pox Hospital has been empty for some time it is maintained in such a condition that any case may be admitted

at a few moments' notice, and such provision places the department in an invaluable state of defence against this disease.

Still a large share of credit must in this Borough be given to the inhabitants who have so wisely adopted the way of preventing Small Pox. I refer to almost universal vaccination for only about 3 per cent. remain unvaccinated, and having seen the invaluable advantages of such conduct why not exterminate the disease by re-vaccination in puberty. All evidence and my own experience goes to show that efficient vaccination is the one great preventive of Small Pox, and whether any person, or his or her children will escape the disease is entirely within that person's control.

Typhus.

This very unusual visitor to Huddersfield appeared in a female aged 32 living in a confined court yard. The disease was typical. The Medical attendant demurred to visiting the patient who was kept at home because she was too ill to be removed. I accepted the responsibility and visited her at least once a day until her death on the 9th day of the attack. Every means of precaution were adopted. The only avenue by which this disease could have been introduced was by correspondence from a district in Ireland, where the disease was known to her father and mother when resident there in their youth.

Measles.

During the year 13 deaths were ascribed to this disease. Beyond noting the outbreak of measles in connection with a school in the Central district, there is nothing unusual. About the beginning of August the disease became prevalent in the South and East Wards, and disappeared suddenly with the onset of the cold weather. In connection with the school a list of all absentees was obtained, and their houses visited. So distinctly was this invasion traced to one family, that had notification of measles been in practice it is probable many of the cases might have been prevented. The 13 deaths represent a death-rate of 0·13 per 1000, which is exactly half of the previous year.

Whooping Cough.

This disease was responsible for 55 deaths. Like measles whooping cough occurs in epidemic cycles. The years of its greatest fatality occurred in 1891, 1887, 1884—when the death-rates from whooping cough were 0·62, 0·68, 0·70 respectively. It is a matter of surprise that so much apathy should exist about a disease that demands such an enormous death-toll. Of the 55, only two occurred in children over five years of age. Surely this too contains a lesson; though children over five are less liable to attacks of the disease still the number of cases in children over and under five is not so disproportionate as 2 to 53 which means simply that the younger the patient the greater the fatality and therefore if parents could be made to view this disease as the most fatal of the commoner infectious diseases much sacrifice of life might be prevented especially amongst infants.

Probably there is no infectious disease less amenable to the action of the Sanitary Authority. Of course our action is very limited. We hear in some unofficial way of the disease, when it has spread to some extent. The Inspector then visits the district and distributes some bills requesting householders to keep the family in which there is an infected member away from school; but real isolation is extremely difficult owing to the duration of the disease.

The disease was with us throughout the whole of the year, and invaded every district of the Borough, leaving its trail most marked by 12 deaths in Almondbury, 10 each in the Lockwood and Central districts, and 9 in Dalton. There is one consideration in connection with the prevalence of this disease that ought to urge parents to greater care, and that is this, as in battle the killed bear but a small proportion to the wounded, so with whooping cough, it has quite as an unenviable a reputation as influenza for leaving impairment of some organ or other of the body behind, rendering it more liable to after disease.

Scarlet Fever.

I have discussed this disease so fully in my quarterly reports that I shall only make a few remarks upon it now.

During the 52 weeks, 462 cases of Scarlet Fever came to our knowledge, the majority of them through notification by Medical

men, while a number were discovered in several house to house visitations. In several instances I discovered by a personal examination of each scholar present in the school, children in an infectious condition. A glance at the table exhibiting the notifications will shew that the disease troubled us in every district except Lindley where only three cases were heard. This district has remained remarkably free for the last six years, probably because of the widespread outbreak in 1887-88. Extraordinary precautions are now being undertaken to keep the district in this happy state.

There is a decrease of 117 below the notifications of 1893, and we may have hope that during 1895 we shall experience another decline. Twenty-three deaths were registered, so that the mortality was scarcely 5 per cent. against 5·2 per cent., the average of previous ten years.

The younger the patient the greater the fatality. In 107 cases amongst children under five years 14 deaths occurred, while only 9 were fatal amongst 355 cases in those over five years of age—that is 13 per cent. proved fatal amongst infants, and only a little over $2\frac{1}{2}$ per cent. amongst the latter.

Of 462 cases 402, or 87 per cent., were removed to the Hospital with a mortality there of 4 per cent., against 11·6 per cent. of those isolated at home; this allows a large margin for cases too ill for removal, and still testifies to the nursing in the Hospital, and also to the fact that this fever is aggravated and more fatal when treated amongst unsanitary surroundings.

Too frequently the idea is heard that this disease is “only” Scarlatina. Although it is not very fatal still those mild cases sometimes develop serious symptoms in the third and following weeks of the illness, frequently leaving permanent impairment of hearing, or kidney mischief which manifests itself in adult life.

The following are the age periods at which the cases occurred, viz:—

Under one.	1—5	5—10	10—15	15—25	25 and over.
4	103	198	108	26	23

The cases were distributed as follows—

1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.
112	117	116	127

Total 462.

Table showing the number of cases of **Scarlet Fever** known to have existed in Huddersfield, during the years 1885—1889, and 1890—1894, with cases heard of in the several quarters of these years, and the deaths registered from the same disease; also the average cases and deaths per quarter in the five years 1885—1889, and 1890—1894.

Quarters.	1885		1886		1887		1888		1889		Average of five years 1885-1889.		1890		1891		1892		1893		1894		Average of five years 1890-1894.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
I.	28	1	91	9	45	4	128	13	72	3	73	6	29	1	46	4	71	3	81	4	112	8	68	4
II.	43	2	96	6	72	5	86	9	119	6	83	6	28	1	76	7	100	6	188	6	107	2	100	4
III.	89	6	130	10	178	2	62	4	107	15	113	7	73	3	113	11	102	6	130	6	116	4	107	6
IV.	91	2	53	8	231	20	50	1	57	2	96	7	71	2	106	8	81	3	180	9	127	9	113	6
	251	11	370	33	526	31	326	27	355	26	365	26	201	7	341	30	354	18	579	25	462	23	388	20

The quarter in each case, is calculated as 13 weeks.
For death rate, see Table VII. in appendix.

Our experience in dealing with disease during 1894 has been interesting and encouraging. In several instances sudden localized outbreaks have as suddenly been nipped in their origin.

Besides exclusion of children from infected houses from School, disinfection of the houses and clothing, and removal of the patients, our success depended largely upon the house to house visitation, conducted in this way. A list of absentees for more than three days from School during the past six weeks is obtained. The visitation is made as far as possible in one day, and on the same day the Medical Officer of Health inspects the children at School. By this means there is less chance of overlooking any children, and parents have no time to get any suspicious cases out of our way.

The following figures for 1894 shew the desirability of removing first cases of Scarlet Fever as early as possible. The 462 cases notified occurred in 341 houses as follows :—

One case each in 260 households	...	260 cases.
Two cases „ 54 „	108 „	
Three „ „ 18 „	54 „	
Four „ „ 7 „	28 „	
Five „ „ 1 „	5 „	
Six „ „ ... ..	... ..
Seven „ „ 1 „	7 „	
	<hr/>	<hr/>
	341	462

The following statement of the various occupations followed by the parents of Scarlet Fever patients affords some idea of many ways the infection of Scarlet Fever may be carried.

Manufacturers and Merchants	...	...	14
Clerks, Accountants, and Ministers...	...	...	32
Millhands—weavers	...	...	30
Do. various	...	...	43 73
Engineers, Boiler Makers, and Blacksmiths	...	...	24
Coal Merchants and Colliers	...	...	12
Railway Workers	...	...	9
Teamers and Horsekeepers	...	...	20

Out-door Workers—Masons	...	...	15
Do. Painters	...	...	9
Do. Plumbers	...	...	2
Do. Joiners	...	...	7
Do. Porters	...	...	9
Do. Labourers	...	...	35 77
Postmen and Policemen	...	..	10
Tailors	...	...	8
Shopkeepers	...	...	16
Publicans and Lodging House Keepers	...		5
Housewives (widows)	...	...	21
Charwomen	...	...	6
Miscellaneous	...	...	18
Occupation not stated	...	...	12

In relation to the influence of Schools in the production of Scarlet Fever it may be stated that of the 462 cases of Scarlet Fever, 314, or 70 per cent. occurred in children attending various Schools in the Borough.

Diphtheria.

This disease claimed a larger number of victims than any year since 1887, which was an epidemic year, and thus broke the continuous run of improvement noticed in the mortality of this disease since that year. During 1894 thirty-six cases were notified, but these do not represent the whole of the cases, as there is much diversity of opinion upon the diagnosis. No doubt cases are included of a very doubtful nature because with this disease, as with Enteric Fever, the flushing and disinfection of the drainage is carried out immediately on receipt of the notification, and sometimes notifications of suspicious cases are sent to secure these valuable measures in the treatment of the patients. The district of Almondbury produced 13 cases, which ended fatally in 7.

Enteric Fever.

In the course of the year 1894 there occurred in the Borough only 31 cases of Enteric or Typhoid Fever, against 57 in the immediately preceding year, or an average of 42 cases for the

five-year period 1890-94. Calculated on the estimated population at the middle of the year, these attacks were equal to a rate of 0·11 per 1000 in 1894, and 0·14 in 1893, while the average annual rate for the five years mentioned had been 0·14 per 1000 inhabitants.

The seasonal prevalence of this disease can be studied in the following table, which shows that the third quarter produced the largest number of attacks, closely followed by the fourth quarter, and this is in accord with general experience. Too much reliance must not be placed upon the number of attacks in estimating the prevalence of this disease, because the medical men have been encouraged to report early cases in which there has been the slightest suspicions, so that the drains might be flushed and disinfected, and the stools deposited in a specially prepared tub, the contents of which are afterwards cremated. Two districts—Longwood and Almondbury—remained entirely free from this disease. In the other districts the number of attacks were as follows :—Central, 9 ; Lockwood, 7 ; Marsh and Fartown, 4 each ; Dalton and Lindley, 2 each ; and one in Deighton. Two cases developed in the Infirmary.

The cases were therefore scattered over the Borough, and were unconnected with one another.

Owing to the large number of suspicious cases of Scarlet Fever notified, and which required isolation at the Hospital, a number of cases of Enteric Fever had to be left at home. I very much regret this because negligent nursing might at any time produce an outbreak.

Table showing the number of cases of **Enteric Fever** known to have existed in Huddersfield during the two periods 1885—1889, and 1890—1894, with cases heard of during the several quarters of the years of these periods, and the deaths registered, also the average cases and deaths per quarter in the five years 1885—1889, and 1890—1894.

Quarters.	1885		1886		1887		1888		1889		Averages of five years 1885-1889.		1890		1891		1892		1893		1894		Averages of five years 1890-1894.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
I.	19	4	13	3	7	1	15	2	10	1	13	2	14	9	4	1	6	1	10	1	5	2	8	3
II.	15	1	9	2	4	1	11	3	14	4	10	2	2	3	5	4	1	1	3	..	5	3	3	2
III.	20	3	9	2	18	3	11	4	16	4	15	3	20	5	19	4	10	3	21	4	11	1	16	3
IV.	12	2	14	5	19	4	19	2	10	1	15	3	26	6	10	6	5	1	23	8	10	5	15	5
Year.	66	10	45	12	48	9	56	11	50	10	53	10	62	23	38	15	22	6	57	13	31	11	42	13

In comparing these figures we must not forget the increase of population.
For the death rates see Table VII. in Appendix.

Diarrhœa.

Diarrhœa was fatal in eighteen cases, which is equal to a death-rate of 0·18 per 1000. With the exception of 1891, when the mortality from Diarrhœa was 0·11, the fatality of 1894 was the lowest yet recorded, and a glance at Table VII. will show the great decline which has taken place in loss of life by this disease during recent years. The distribution of the disease as regards season would indicate that that had little or no influence. Five deaths occurred in the first quarter—two in the second, six in the third, and five in the fourth—in all, only 18. Of these, six occurred in children under five years of age. The Central contributed 8, Marsh, Fartown, and Almondbury 2 each, Lockwood, Lindley, and Longwood 1 each; while no death from diarrhœa occurred in Deighton.

Phthisis.

The following statement displays the occupations of the patients who have died from this disease during 1894 :—

Domestic Occupations	...	...	50
Cloth Weavers	...	...	14
Rug Weavers	...	..	4
Labourers	...	...	12
Stone Masons	...	...	8
Office Clerks	...	...	11
Cotton Spinners	...	...	7
Woollen Pieceners	...	..	7
Woollen Menders	...	...	5
Engineers	...	...	5
Hawkers (Fish, &c.)	...	...	6
Boot and Shoe Makers	...	...	4
Commercial Travellers	...	...	4
Plasterers	...	...	3
Cloth Dressers	...	...	3
Silk Dressers	...	...	3
Joiners	...	...	3
Tailors	...	...	2
Teamsters	...	...	2
Farmers	...	...	2
Card Cutters	...	...	2
One each of the following :—Rag Sorter, Wheelwright, Baker, Dyer, Coal Miner, and Bookbinder	...	...	6
Scholars	...	...	6
Under Five	...	...	11

Amongst those 180 deaths, it was found that in 69 families death from the same disease had previously occurred, thus :—

In 27 families, 1 death

„ 22	„ 2	„
„ 14	„ 3	„
„ 3	„ 4	„
„ 2	„ 5	„
„ 1	„ 6	„

With regard to the means of accommodation in fatal cases, it was noted that

3 deaths occurred in 3 cellars

5	„	„	1 roomed house
44	„	„	2 „
54	„	„	3 „
29	„	„	4 „
24	„	„	5 „
11	„	„	houses over 5 rooms
10	„	„	the Workhouse

The deaths were distributed as regards season as follows :—

1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	Total.
59	40	41	40	180

As regards sex, 103 were males, 77 females.

Influenza.

This disease, commonly known under the several names of Influenza, Epidemic Catarrh, Grippe, &c., caused ten deaths, against 32 in 1893, 50 in 1892, and 106 in 1891. This pleasing improvement has been seriously stopped by the general prevalence of the disease, when writing this report in the month of March, 1895. In 1894 Influenza was limited to the first and second quarters, during which 10 deaths were registered, one of them in a child under five years of age. The unequal incidence of fatal Influenza upon persons of different ages is remarkable. The disease has apparently become endemic in this country, and has appreciably affected the mortality statistics, especially those relating to the fatality of respiratory diseases.

Fifty-one inquests were held by the Coroner, and those relating to violence were as follows :—

Burns and Scalds	...	...	...	3
Drowning	..	...	...	4
Suffocation	...	...	...	4
Other Injuries—				
Violence (not accidental)		...	...	9
Homicide	...	...	...	2
Cut 'Throat	...	...	...	3
Hanging	...	...	...	4
Drowning	...	...	...	6
Poison	...	...	...	3

Deaths in Public Institutions.

Seventy-three deaths occurred in the Crosland Moor Workhouse last year, against 86 in 1893, and 87 in 1892. Forty-eight deaths took place in the Infirmary against 50 in 1893, and 42 in 1892.

In the Fever Hospital, Birkby, there were 17 deaths against 22 in 1893, and 19 in 1892. Of the 1,563 deaths during 1894 the amount of 3·4 per cent. of the deaths were not certified either by a Registered Medical Practitioner or by the Coroner. The rate per cent in the 33 large Towns was 1·7 so that our position in this respect is one we cannot approve of.

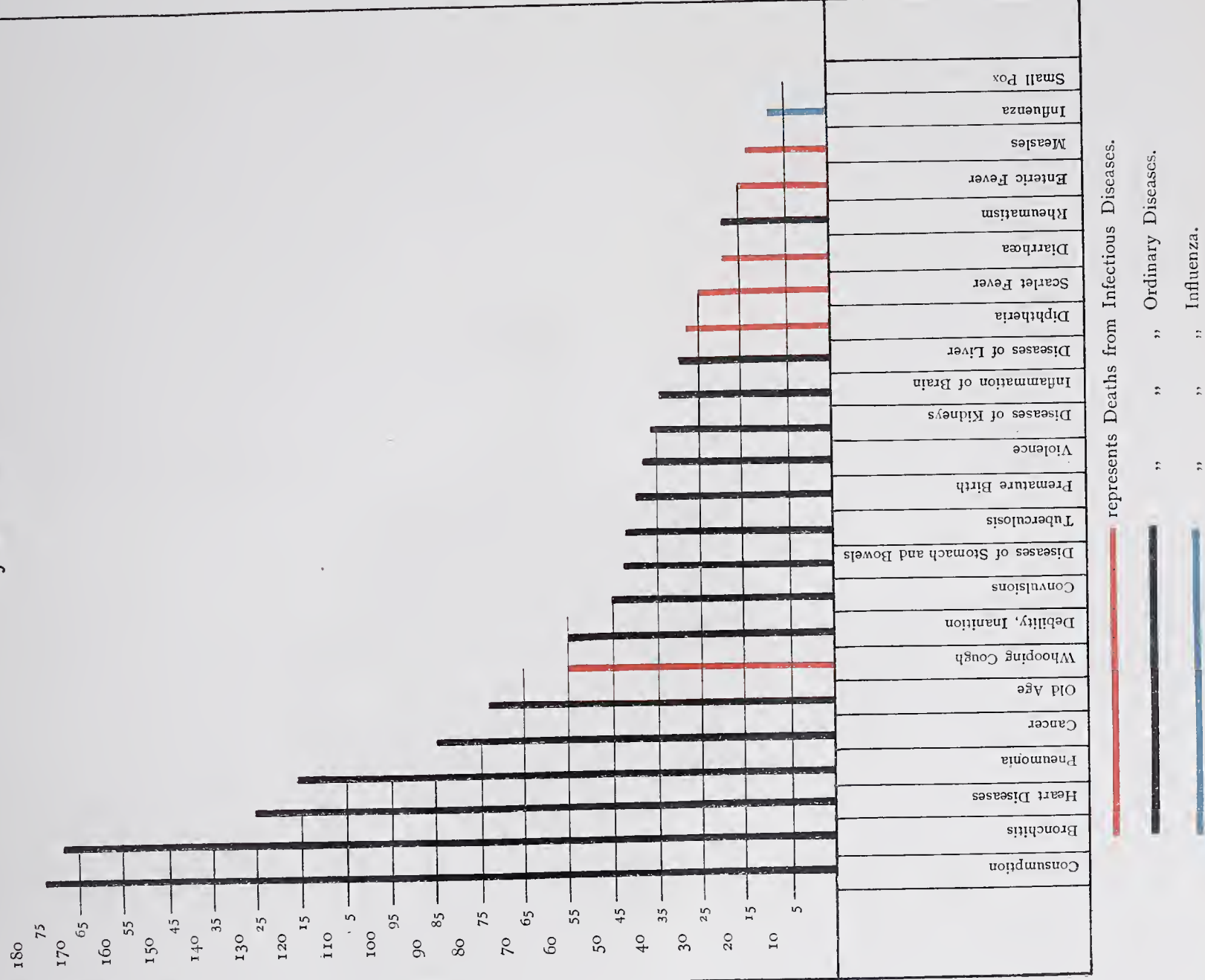
Notification Table.

Notification of infectious diseases has been carried out with no difficulty or unpleasantness. The following table gives the number and districts from which they came. According to the Huddersfield Improvement Act, 1870, the householders and medical men in attendance are required to notify cases of dangerous infectious diseases to the Sanitary Authority. These diseases are defined in the Act as “Smallpox, Cholera, Scarlet Fever, (Scarlatina), Typhus, Typhoid Fever, Diphtheria, and Puerperal Fever.”

Analysis of Infectious Cases Reported,
52 weeks ended December 29th, 1894.

DISTRICTS.	Small Pox	Measles	Scarlet Fever	Diphtheria	Typhus	Enteric	Other Fever	Erysipelas	Chicken Pox	Puerperal Fever	Doubtful	AGES	TOTALS
Central Wards..	... 3	2 3	17 68	5 1	... 1	... 9	... ...	... 1	... ...	... ...	1 1	Under 5... Over 5...	25 87
Marsh .....	... ...	... 1	13 27	2 ...	... ..	1 3	... ...	... ...	... ...	... 2	... 1	Under 5... Over 5...	16 34
Fartown .....	... ...	... ...	16 49	3 2	... ...	... 4	... ...	... ...	... ...	... ...	1 ...	Under 5... Over 5...	20 55
Deighton and Bradley ...	.. ...	... ...	15 35	2 1	... ..	... 1	... ...	... 2	... ...	... ...	... 1	Under 5... Over 5...	17 40
Dalton .....	... 2	... ...	11 32	... ...	... ...	... 2	... 1	... ...	1 ...	... ...	1 2	Under 5... Over 5...	13 39
Almondbury ...	... ...	... ...	8 59	5 8	... ...	... ...	... ...	... 3	... ...	... ...	1 3	Under 5... Over 5...	14 73
Lockwood .....	... ...	10 8	16 49	1 5	... ...	... 7	... ...	... ...	... ...	... ...	4 5	Under 5... Over 5...	31 74
Lindley .....	... ...	... ...	... 3	... 1	... ...	... 2	... ...	1 ...	... ...	... ...	... 3	Under 5... Over 5...	1 9
Longwood .....	... ...	1 ...	10 31	... ...	... ...	... ...	... ...	... ...	... ...	... ..	... 3	Under 5... Over 5...	11 34
Infirmery.....	... ...	... ...	1 1	... ...	... ...	... 2	... ..	... 1	... ...	... ...	... ...	Under 5... Over 5..	1 4
Crosland Moor Workhouse...	... ...	... ...	... 1	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	Under 5... Over 5...	.. 1
Whole Borough	... 5	13 12	107 355	18 18	... 1	1 30	... 1	1 7	1 ...	... 2	8 19	Under 5... Over 5...	149 450

Diagram showing Mortality from some of the principal causes of Death during the year 1894.



Hospital.

During the year 413 patients have been removed to the hospitals for treatment and isolation, suffering from infectious diseases. Of these, 402 suffered from Scarlet Fever, 5 from Small Pox, and 6 from Enteric Fever. Of the 510 cases under treatment during the year, 16 ended fatally, all of them, except one fatal case of Enteric Fever, being due to Scarlet Fever. It is necessary to note that several cases, although seriously ill, were removed either with the consent, or by the express wish, of the parents, just to give them a chance. In two cases the medical attendants declared there was little, if any, hope of recovery. The zeal and tenacity displayed in the nursing of those cases were highly laudable. The patients admitted have corroborated the experience of former years that Scarlet Fever seems to possess greater malignancy in the houses of the poorer classes, and especially so amongst those inhabiting a one-roomed house.

I consider the Birkby Fever Hospital has done splendid service, and those acquainted with such work can recognise how great is the danger, individually and collectively, to the community, which it averts or mitigates. The Visiting Sub-Committee has visited, under due precautions, and always expressed satisfaction, while many of the patients have shown their gratitude in letters which have been read to the Committee, and in gifts to the Hospital for the enjoyment of those unfortunate in being prisoners after the donor's discharge.

For the adult patients a billiard-table has been provided, and many hours have been wiled away, and a hope has been expressed that before long a piano will be secured. During 1894, 89 per cent. of the Scarlet Fever patients has been removed to the Birkby Hospital, and it behoves the Authority to provide, as far as possible, the comforts and enjoyments of home life in these institutions.

Accommodation for Infectious Cases.

It is now many years since this matter came under consideration. The accommodation cannot be reckoned as the total number of beds, because such reasoning would be misleading. It depends largely on the wards, — *e.g.* : We possess two wards of ten beds each for Enteric Fever cases. If one adult male and one adult female are admitted, then both wards are occupied, to the exclusion of other diseases, whereas, if we had four wards of five beds each, then the number of admissions of Diphtheria could be increased, and much trouble and inconvenience would be saved to us, when such diseases as measles require to be removed, when occurring in large lodging houses.

The accommodation provided at the temporary Hospital for Small Pox at Mill Hill has relieved us of much anxiety. The patients treated there expressed themselves highly delighted, and simply because they could there amuse themselves out of doors in the enclosed paddock, and yet perfectly, without fear to the neighbourhood. When unoccupied the tent and convalescent wards are kept so that an admission of such a disease, as Cholera—if unfortunately it should appear at any time—can be instantly dealt with.

The following is the Report of patients in the hospital for 52 weeks ended Saturday, 29th of December, 1894.						
	Small pox	Scarlet Fever	Diphtheria	Enteric, or Typhoid Fever	Other, or doubtful cases	Total
Number in hospital on Saturday, 31st of December, 1893 ...	1	108	...	1	...	110
Number since admitted ...	5	402	..	6	...	413
Number discharged ...	6	449	...	5	...	460
Number Died ...	...	15	...	1	...	16
Number remaining in hospital ...	...	46	...	1	...	47

Table showing **new cases** of one or other of the seven commoner zymotic diseases, and of lung diseases, treated as out-door paupers, or as home patients of the Infirmary, during the 52 weeks of 1894 and each of its quarters.

	Total Cases.		Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Continued Fever.			Diarrhoea.	Consumption.	Other diseases of the breathing organs.	Consumption and other lung diseases together.
	All diseases.	Seven zymotic diseases.						Typhus.	Typhoid.	Febricula.				
I.	248	8	...	...	...	2	1	...	2	..	3	13	75	88
II.	239	4	...	2	...	...	1	...	...	...	1	13	69	82
III.	242	39	...	24	3	..	3	...	...	...	9	6	49	55
IV.	255	32	...	5	4	1	20	...	1	...	1	9	85	94
Year 1894	984	83	...	31	7	3	25	...	3	...	14	41	278	319
Per cent. of all cases.		8.4	...	3.18	0.07	0.03	2.5	...	0.03	...	1.4	4.15	28.25	32.40

TABLE, SIMILAR TO THE LAST, FOR 1893.

	Total Cases.		Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Continued Fever.			Diarrhoea.	Consumption.	Other diseases of the breathing organs.	Consumption and other lung diseases together.
	All diseases.	Seven zymotic diseases.						Typhus.	Typhoid.	Febricula.				
I.	300	17	2	2	...	1	9	...	...	...	3	12	113	125
II.	248	13	1	2	2	...	3	...	...	..	5	20	64	84
III.	218	34	...	1	...	...	2	...	...	1	30	11	30	41
IV.	256	10	...	3	...	...	1	...	...	...	6	15	74	89
Year 1893	1822	74	3	8	2	1	15	...	...	1	44	58	281	339
Per cent. of all cases.		6.24	0.03	0.08	0.02	0.01	1.47	...	...	0.01	4.30	5.68	27.50	33.17

Table showing the rates of Mortality in Huddersfield for the year 1894, and **each of its quarters**, from all causes, from the seven zymotic diseases, from consumption and other lung diseases, and the ratio of the Deaths in children under one to a thousand births in the same periods, with the corresponding Death-rates in the 33 great towns.

Quarter.	HUDDERSFIELD.				33 TOWNS.		
	All Causes.	Seven Zymotics.	Consumption, &c.	Children under one per 1,000 births.	All Causes.	Seven Zymotics.	Children under 1.
I.	18.29	1.18	5.83	175	20.96	2.41	154
II.	15.28	1.59	4.44	153	17.43	2.55	132
III.	13.28	1.47	3.30	114	16.38	2.78	169
IV.	16.83	1.83	5.05	194	17.76	1.97	155
Year 1894	15.92	1.52	4.65	160	18.14	2.43	152

It will be of service to contrast here the quarters of 1894 with those of 1893.

SIMILAR TABLE FOR 1893.

Quarter.	HUDDERSFIELD.				33 TOWNS.		
	All Causes.	Seven Zymotics.	Consumption, &c.	Children under one per 1,000 births.	All Causes.	Seven Zymotics.	Children under 1.
I.	18.28	0.90	6.75	125	22.01	2.00	145
II.	17.28	0.99	5.80	131	19.85	2.77	158
III.	16.46	2.59	3.58	171	21.86	5.42	250
IV.	17.73	1.15	5.56	136	22.67	2.56	174
Year 1893	17.43	1.38	5.42	141	21.60	3.18	181

Abstract of Monthly Meteorological Observations for the Year 1894.

1894. MONTH.	Mean Barome- ter, inches.	Mean Ther- mometer of F	Mean Diurnal Range of F	Mean Height Earth Ther- mometer 4ft. 6in.	Mean Height Earth Ther- mometer 2ft. 6in.	Mean Moisture of Air, %.	Total Rainfall (inches)	Prevail- ing Wind.	Velocity of the Wind, miles per hour.	Highest recorded Tempera- ture in the sun.	Highest recorded Tempera- ture in the shade.	Lowest recorded Tempera- ture in the night.	Lowest recorded Tempera- ture on the grass.	Total number of Deaths.
January . . .	29.64	37.0	7.4	42°	38°	75.2	4.91	W.	37	75°	49°	22°	20°	196
February	29.74	39.0	11.3	41°	38°	77.2	6.96	S.W.	49	85°	50°	27°	23°	137
March	29.74	42.9	17.0	40°	40°	61.1	3.78	S.W.	24	90°	55°	30°	27°	116
April.....	29.72	48.6	17.7	43°	45°	63.2	2.22	S.E.	16	108°	64°	33°	32°	106
May.....	29.81	47.7	15.6	46°	48°	54.0	2.44	N E.	26	107°	64°	35°	33°	162
June	29.86	56.1	16.0	48°	51°	60.6	2.36	S.E. } S.W. }	18	108°	70°	44°	42°	107
July.....	29.70	60.5	19.7	53°	58°	56.8	3.51	S.W.	19	113°	74°	48°	47°	100
August	29.77	57.4	13.5	55°	55°	62.4	2.76	W.	25	107°	69°	46°	44°	132
September.....	30.05	51.1	11.6	53°	53°	66.7	0.83	W.E.	14	94°	60°	39°	38°	94
October.. ..	29.79	47.0	10.6	51°	49°	74.0	5.41	E.	23	84°	57°	34°	32°	168
November.....	29.76	43.5	9.0	48°	47°	74.5	1.66	S.W.	28	72°	53°	35°	32°	104
December	29.77	40.8	10.2	46°	43°	76.8	2.75	S.W.	44	61°	50°	31°	27°	141
Average ...	29.78	47.6	13.3	47°	47°	66.9	39.59	S.W.	27	92°	60°	35°	33°	1563

The work of the department has been carried on with the usual zeal and earnestness, and is displayed in the tables in the appendix. During the year the Inspectors of Nuisances have been able to devote more time to actual inspection work by being released from the supervision of the work of scavenging. This has been brought about by the necessity of having closer observation of the scavengers than could be given by the inspectors in their dual capacity. Mr. Jackson, statistical clerk in my office, has been appointed Scavenging Superintendent—a vexatious position for anyone. During the past five years, numerous schemes have been discussed as to the most efficient and economical methods of scavenging. This is a subject teeming with difficulties, and one in which “efficiency” cannot result from economy in the sense of merely lessened expenditure.

Workshops.

During the year much attention has been given to the inspection of workshops. This is a part of our work, which until recently, had not received the attention from the Sanitary Department that it deserves. During the year, 181 workshops have been visited, and the particulars then taken have been entered upon the register. Mr. Prior (Her Majesty’s Inspector of Factories) has given us great assistance and provided us according to the Act with a list of all new workshops of which he has received official notice. The general condition of the workshops may be stated to have been satisfactory. Several cases of overcrowding have been remedied. I have already drawn your attention to a serious defect in connection with the use of gas for heating implements, and for the boiling of liquids used in trade. No means are provided for carrying away the products of combustion, and these products accumulate in the workshops and are undoubtedly highly prejudicial to the health of the workman. The repeated visits to the workshops have no doubt produced beneficial changes in the more frequent cleansing of the workshops, and by causing more attention to be given to ventilation.

The following statement is a list of the various trade premises inspected :—

Trades.					Total.
Tailors	...	...	...	...	22
Milliners		...	...	...	11
Dressmakers		...	...	...	24
Joiners	...	...	...	...	7
Jewellers	...	...	...	...	8
Gunmaker		...	...	...	1
Cabinetmakers		...	...	...	3
Whitesmiths		...	...	...	4
Bootmakers		...	...	...	17
Brushmakers		...	...	...	6
Polishers	...	...	...	...	3
Wheelwrights		...	..	...	6
Upholsterers		...	...	...	5
Wood Carvers		...	...	...	2
Tinplate Workers	...	...	...	...	5
Cloggers	...	...	...	...	3
Saddlers	...	...	...	..	3
Hearthrug Makers	...	...	...	...	3
Shirtmakers		...	...	...	3
Clothiers	...	...	...	...	2
Gilders	...	...	...	...	2
Plumbers		...	...	...	5
Tea Merchants		...	...	...	2
Knitters	..	...	...	...	2
Pianoforte Dealers	...	...	...	...	5
Dressmakers and Milliners		...	..	...	6
Ladies' Outfitters	...	...	...	...	3

163 + 18 = 181

One each of the following :—Sculptor, Hotwater Engineer, Clogger, Hat Maker, Corset Maker, Sauce Maker, Window Blind Maker, Manufacturing Chemist, Wire Worker, Rope Worker, Cork Cutter, Cooper, Engraver, Silicate Works, Organ Builder, Shoeing Smith, Cycle Manufacturer, Currier.

House Refuse Removal.

This is most important from a health and comfort point of view, and during the past two or three years has been efficiently attended to, if we judge by the number of complaints received. Some of the complaints are no doubt frivolous, still they form a fairly reliable index as to the efficiency of the work. Mr. Jackson has furnished me with some interesting information as to the work accomplished. It is now more than ever necessary to notice these complaints, because, in our anxiety to reduce expenditure, the comfort and health of the ratepayers must not be forgotten.

Now that the Berry Brow and Longwood sewers are nearing completion, some of the schemes such as the question of establishing district depôts for the disposal of tub contents might be again considered by the Sanitary Committee, so, too, might the removal of ashpit refuse by tram waggon.

Scavenging has been hampered by the unsettled day-to-day policy which has characterized the considerations of this matter, and it is to be hoped that the whole of this most important sanitary work will be early and finally decided upon.

Destructors.

Although the figures produced by the Scavenging Superintendent shew that the Hillhouse Destructor has not been fully utilized, still it is a matter of importance that there has been no increase in the number of tips. These accumulations are objectionable, although in Huddersfield the organic filth bears a small proportion to the refuse resulting from coal combustion.

Food Supply.

During the year every precaution has been taken to maintain the food supply at its high quality. The Butchers' shops have been regularly visited, especially on Saturday nights. Now that the commission on Tuberculosis in the recent report points out in connection with the transmission of Tuberculosis from animal to man that "the danger is a real one," our system of meat inspection should become more methodical, and certainly more rigorous, just as it is in Continental countries where all carcasses are examined. With the provision of our excellent Abattoir, a large amount of meat sold in the Borough is under supervision; but in the following Table it will be noticed that the sale of carcasses brought from other towns is on the increase, and it is difficult to pick out the diseased meat when carefully dressed and the viscera have been disposed of. This difficulty therefore points to a national system of inspection of all animals intended for human consumption. This increase in the sale of carcasses will probably go on because of the trouble and expense saved in slaughtering. An inspection of the private slaughter-houses is made annually by the Markets Committee. There are 24 slaughter-houses in the Borough, but only a few have a license to slaughter cattle, most of them are used for the killing of sheep and pigs.

I have brought before the notice of this Committee several important matters—the first relating to the slaughtering of young calves, under six weeks old, a practice which ought to be prohibited. The second refers to the provision of a tripery. The third to the exposure of uncovered carcasses in transmission through the streets. I might also here put on record the fact that the sale of Lamb wrapped in "sheep net" was brought before the notice of the Butchers' Association, and at a meeting of this Association, a resolution was passed refusing to support any member prosecuted for the above practice, which consists in selling the loin and legs of Lamb enveloped in sheep fat. This increases the weight by three or four pounds, and is not the article sought for by the purchaser.

The following figures relating to the meat trade have been kindly supplied to me by Mr. Matthewman.

Abattoir.	Average for five years.	1894
Beasts	3767	3681
Calves	2199	1807
Sheep	13542	14722
Pigs	5954	5531
Carcases brought in	983	912
Private Slaughter Houses.		
Beasts	794	1015
Calves	447	507
Sheep	2623	3145
Pigs	812	955
Total	31121	32275

Cowsheds.

Following the systematic inspection of 1893, 308 cowsheds have been visited during 1894. It has been found that the advice given with regard to the collection and storage of milk has generally been acted upon. With regard to the Shippens there has been little or no structural alteration, (beyond the repairing of the floors), which are generally made with flagstones or bricks. Whitewashing and the more frequent removal of manure from the neighbourhood of the Shippen, is now much better attended to. The storage of food, especially the hay, immediately in front of and just over the animals, is not satisfactory, because it is evident the hay being so long retained in the place must become tainted by the emanations from the cows, and in case of infectious diseases, by the infected material. It is common also to find a

horse stabled close by the cow stalls which is objectionable. We have still some difficulty in obtaining sufficient cubic space and efficient ventilation, but taken altogether one cannot fail to see a general improvement.

It is satisfactory to note the improvement accomplished in the Shippens of the larger farms on the estate of Sir John Ramsden, these well-constructed and airy places must tell their beneficial tale on the health of the cows, and on the production and the quality of the milk.

Offensive Trades.

The complaints of the past year have been confined to soap boiling, bone boiling or bone steaming, and to size boiling. In the one case of bone steaming, the matter has been frequently before the Committee, and every opportunity has been afforded for remedying the nuisance, but the offenders still continue to cause much annoyance to the neighbourhood by the sickly smell emitted from their works. With regard to the size boiling in the Fartown district, the owner of the premises has tried to minimize the nuisance by being more careful in the operation, and only conducting it on Mondays instead of at intervals during the week. In connection with premises where offensive trades are conducted, during the year 132 visits have been made.

Smoke.

Bad trade and a poor quality of coals have tended to increase the nuisance from smoke. During the year 46 observations were taken, and several of the worst offenders, by the action of the Committee, have either introduced new apparatus with a view of increasing the combustion of the gases and minimizing the emission of black smoke, while in two cases the manufacturers have thought it best to increase their boiler power by the introduction of new boilers.

River Pollution.

A complete survey has been made of the principal streams in the Borough, and personally I have followed up the work of the Inspectors. The results of the survey are somewhat surprising as revealing comparatively little pollution from domestic sewage within the Borough. In all, 46 points of pollution were observed, and the greater part of these will be rectified immediately on the completion of the sewer into the Longwood district. Several important pollutions from house drainage have been removed

during the past year, and we may truthfully repeat our opinion that the Holme and Colne as they enter the Borough are in a filthier state than when they leave it. During the year no less than 600 dogs and cats were taken from the streams and canals of the Borough, and many of them no doubt have been washed down from districts above us. The cost of the removal of these animals is a cause of expenditure which might be obviated if ratepayers would only understand that to some extent they have the rates in their own hands. The introduction of extracts, as in the case of logwood dyeing, has removed some of the solid matter from the streams, and only in one case had we to find fault with the emission of logwood chips into the river during the year 1894. The Rivers Board is now taking action, and it is to be hoped that very soon we will see an improvement in the Holme and Colne as they enter the boundaries of the Borough.

Flushing Drains.

This most important operation is too frequently neglected. The drains are out of sight and so forgotten until they make themselves obnoxious, whereas it is as necessary to flush the drains as it is to sweep the chimney, and the inhabitants are wisely beginning to realise this more and more. During the year, the drains of 2,097 premises were flushed and disinfected; of these, 180 were cleansed at the request of the owners and were paid for.

Street Gullies.

Owing to several complaints, unusual attention has been paid to street gullies; many of them are directly open to the sewer, while others are sealed, and too frequently the complaint arises from thoughtless persons throwing stinking matter, such as cabbage water and night chamber refuse, into these gullies. Special visits have been paid to some streets in which these habits have been common, and it has been found that by warning the individual residents in the street, they have desisted and professed that what they did was entirely through ignorance.

Bakehouses.

There are 57 bakehouses on the register, and of these 48 have been visited. It is our custom now to make periodical visits to every bakehouse, so that there is not that interference necessary which prevailed a few years ago.

The following tabular statement exhibits the work accomplished in this department.

SUMMARY.

	1st quarter	2nd quarter	3rd quarter	4th quarter	TOTALS
Total Number of Inspections of Premises	1176	1174	549	544	3443
Inspection of premises for Nuisances	765	491	223	229	1708
Do. premises where offensive trades are conducted	45	48	25	14	132
Do. Dwellinghouses in house to house visitation ... ..	...	...	...	...	...
Do. Workshops	58	26	...	97	181
Do. Schools ... ..	...	...	7	4	11
Do. Slaughter Houses ... ..	...	1	...	...	1
Do. Canal Boats	25	19	...	1	45
Do. Dairies and Milkshops ... ..	...	3	...	2	5
Do. Cowsheds	33	243	23	9	308
Do. Bakehouses	5	11	3	29	48
Do. Markets	daily	daily	daily	11	11
Do. Show Vans ... ..	...	46	46	2	94
Do. of premises where no nuisance is found	245	286	222	146	899
Revisits to work in progress	278	193	87	271	829
Visits to see if notices are being attended to	70	96	67	53	286
No. of premises visited where Zymotic diseases have occurred	83	108	107	131	429
Do. inspected do. do.	83	108	107	131	429
Do. disinfected do. do.	131	107	116	116	470
Do. flushed do. do.	83	108	107	131	429
Do. visited searching for Fever do.	311	357	859	203	1730
Total Number of visits to infected houses	449	280	330	541	1600
Do. revisits where cases are isolated at home	128	65	65	127	385
Infectious diseases reported	129	140	148	182	599
Cases removed to Hospital	101	96	108	108	413
Number of articles disinfected by Lyon's disinfectant	2885	2624	2693	2774	10976
Number of houses cleansed, repaired or whitewashed	1	53	51	34	139
Number of premises flushed by request of owners (paid for)	42	50	39	49	180
Other premises, yards or courts flushed	568	498	591	260	1917
Preliminary notices to owners	108	152	77	69	406
Owners seen personally	85	170	97	59	411
Number of legal notices issued for abatement or abolition of nuisances	11	33	10	13	67
Notices handed over to Borough Surveyor's Depart- ment by request of Committee ... ..	...	...	5	2	7
Do. do. owner	8	3	1	10	22
Letters written... ..	298	373	345	149	1165
Nuisances reported at Sanitary Office	19	15	42	32	108
Do. inspected	19	15	42	32	108
Summonses taken out	2	...	...	...	2
Smoke observations taken .. ..	...	28	7	11	46
Old Privies abolished	9	8	9	4	30
Number of Tub Closets registered	56	85	62	28	231
Do. applications received to empty Ashpits	541	393	186	265	1385
Do. do do. Tubs	22	34	25	32	113
Do. Receptacles emptied	102348	119729	160339	119322	501738
Do. visits under Food and Drug Acts	24	8	14	21	67
Meat, seizures made or destroyed... ..	1 pig (20st.)	...	15 pigs	1 pig	17 pigs
Fish ... ..	...	...	...	...	...
Fruit ... ..	...	...	67 lb.	...	67 lb.
Food and Drugs—samples purchased	25	9	8	27	69
Do. adulterated	2	1	...	1	4
Water samples taken for Analysis	2	3	4	...	9
Do. polluted	1	3	1	...	5

COUNTY BOROUGH OF HUDDERSFIELD.

Canal Boats Acts, 1877 and 1884.

Report of the working of these Acts during the year ended December 31st, 1894.

To the Huddersfield Urban Sanitary Authority.

The work of Canal Boat Inspection during the year 1894, has been seriously interfered with owing to the illness and death of the Canal Boats Inspector, Mr. James Lightfoot.

The number of boats met with during the year was 41, and of these, 46 inspections were made, against 94 of the previous year. These boats came principally from Hull, Goole, Wakefield, and Mirfield, and were found, generally speaking, to be in a satisfactory condition.

The cargoes, as in past years, were of a miscellaneous character, the principal being Logwood, Timber, and general articles of merchandise.

The population found on board these boats numbered 153 persons, viz. :—adult males, 92 ; adult females, 28 ; and children, 33.

Ages of Children found on Canal Boats.

Ages	Months		YEARS.													TOTALS.
	1	4	1	2	3	4	5	6	7	8	9	10	11	12	13	
Number	2	1	2	2	2	2	2	...	3	3	3	3	4	2	2	33
Males	2	1	2	1	1	...	2	...	1	2	2	...	3	2	2	21
Females .....	...	...	...	1	1	2	...	...	2	1	1	3	1	...	...	12

Annexed are particulars of the information especially desired by the circular dated 29th December, 1893, issued by the Local Government Board and herein replied to seriatim.

- (1) The No. 1 District Inspector of Nuisances was appointed Inspector under the Canal Boats Acts.
- (2) 46 Boats, including 29 broad boats and 17 Flyboats; of these 30 had been registered at Goole, 12 at Mirfield, 1 at Hull, 1 at Wakefield, 1 at York, and 1 unregistered.
- (3) The infringements of the Acts and regulations with respect thereto, were as follows :—
 - (a) Registration. (One).
 - (b) Notification of change of master or owner. (None).
 - (c) Absence of Certificate. (Six). One owner was the offender in four cases. In two cases notices were served on the owner and duplicate duly returned, and in some of the others personal explanation of the Captain was accepted. It is still surprising that boats having passed through other inspection districts should arrive here without Certificate.
 - (d) Marking. (Four). All belonging to the same owner. Subsequent inspections show that the Acts have been complied with.
 - (e) Overcrowding. (None). The 46 Boats inspected were registered for the accommodation of 248 persons, but only 153 were found occupying the cabins.
 - (f) Separation of Sexes. (None). As in the previous year the ages and relationship of the dwellers in the 46 boats did not necessitate separation.
 - (g) Cleanliness and Ventilation. Only four of the cabins might be described as dirty, and orders were given to thoroughly clean them out.
 - (h) Painting. (Two). One form was issued requiring painting to be done, and was duly returned; and in the other case, the boat has been broken up.
 - (i) Provision of Water Cask. (No infringement). Casks or other vessels being generally clean and free from visible pollution.

(j) Removal of Bilge Water. Generally well attended to.

(k) Notification of Infectious Disease. (None).

(l) Admittance. In no case was the Inspector refused.

(4) No legal proceedings taken.

(5) Notice forms are sent to the owner requesting the contraventions to be remedied, and the duplicate notice returned within a specified time, signed by some other Canal Boat Inspector. All cases of contraventions are reported to the Sanitary Committee.

The arrangements made through the kindness of the L. & N. W. Ry., whereby their Lock-keeper at the entrance of the Huddersfield Canal, notifies daily all boats passing up the Canal, have been continued throughout the past year.

Several Congresses were held during the year.

The object of these Congresses may be said to be two-fold ; on the one hand to provide for the assemblage of sanitary workers to compare their experiences and to interchange their ideas, and on the other hand to assist in the diffusion of public interest and knowledge in sanitary matters by showing what each community has the power to do, and the duties to be performed.

In the month of July, Sanitary Authorities were invited by the London Council to send delegates to a Conference in London, in connection with the prevention of the spread of diseases by vagrants. Delegates attended from Huddersfield, and the following resolutions amongst others were agreed to after prolonged discussion.

1. That there should be power to Local Authorities to require Medical Examination of all persons entering Common Lodging Houses or Casual Wards, and that each inmate of a Common Lodging House or Casual Ward should, on admission have a bath of fresh water.

2. That Local Authorities should have power to order the keeper of a Common Lodging House in which there has been Infectious Disease, to refuse fresh admissions for such time as may be required by the Authority.

3. That the Local Authority should be empowered to require the temporary closing of any Common Lodging House in which Infectious Disease has occurred.

4. That Local Sanitary Authorities should have power to require the detention of any inmate of a Common Lodging House or Casual Ward who may reasonably be suspected of being liable to convey Infectious Disease.

5. That means should be provided for the detention and isolation of any vagrants found wandering in a public place if reasonably suspected of being liable to convey Infectious Disease.

6. That the Local Authority should have full power to require the disinfection of the person and the clothes of any person in a Common Lodging House or Casual Ward whether infected or exposed to infection.

7. That arrangements should be made by which the occurrence of Infectious Disease in Common Lodging Houses or Casual Wards should be made known by the Local Authority of the district to the Local Authorities of other districts.

8. That Local Authorities should be empowered to require the vaccination or the revaccination of persons in Common Lodging Houses or Casual Wards who are exposed to the infection of Small Pox.

At the Congress of the British Institute of Public Health the following resolutions were adopted by the various sections.

1. That this Conference instructs the Executive of the British Institute of Public Health to impress upon the Government the necessity of making it compulsory on all Local Authorities to provide adequate and suitable Hospital Accommodation for Infectious Diseases including powers for compulsorily acquiring land.

2. That in the opinion of this Congress the Local Government Board is not justified in affording owners and occupiers of land in the vicinity of a site proposed to be purchased by a Public Authority for Infectious Hospital purposes, any protection beyond that given them by the action of the general law.

3. That Municipal Authorities should be empowered to establish and maintain Winter Gardens with wholesome Entertainments for the people.

4. That the Preventive Medicine Section of the Congress of the British Institute of Public Health now sitting in London would suggest to the Medical Officer of the Local Government Board the advantage that would accrue to the Public Health if his Department would collect and publish the salient points bearing upon the proof of the preventibility of Consumption and Tubercular Diseases generally (*i.e.* the summary of our present knowledge of causation of these diseases together with practical suggestions as to the details of precautionary measures to be observed by individuals or to be adopted by public bodies, and that such facts and recommendations be disseminated as widely as possible.)

5. That in the opinion of this joint conference of the Chemical, Municipal, and Parliamentary Sections of the British Institute of Public Health, amendment of the Sale of Food and Drugs Act is required in the following among other directions :—

- a.* The modification of the Warranty Defence in such a way as to ensure the punishment of the real offender.
- b.* The appointment of some adequate and efficient scientific Authority for the fixing of Milk and other standards and the investigation of analytical methods.
- c.* The registration of Itinerant Vendors, and further provision for sampling goods in transit.
- d.* The requirement of clear and legible Labelling of Mixtures and Impoverished Goods.

- e. The clear inclusion in the term "Food" of such articles as Baking Powders which under the law as at present construed may be so made and sold as to injure the health of the public.

6. That the Local Government Board, the Metropolitan Asylums Board and the various County Councils have their attention called to the importance to the public of the early recognition and accurate diagnosis of Diphtheria, and that they be asked to afford medical men facilities for obtaining such bacteriological assistance as may lead to the prompt recognition of the disease.

7. That Municipal Authorities should be empowered to establish and maintain crematoria.

8. That Testators should be empowered to direct how their bodies are to be disposed of, and executors be compelled to observe such directions.

9. That it is desirable in the interests of Public Health that the present permissive action provided in the Public Health Act of 1875 :—To construct Public Slaughter Houses, be made compulsory, and that after the building of such houses, notice be given to owners of all private slaughter houses that after the expiration of two or three years, no further slaughtering can be permitted in any, but Public Slaughter Houses.

10. That it is desirable that a representation be made to Government, that the costs incurred in Port Sanitary Work in seeking to protect the Country from the invasion of Cholera should be paid in whole, or in part by the State.

The following were the recommendations of Engineering, &c. Sections:—

1. That the present want of uniformity in the Regulations and Bye-laws of Local Authorities in relation to Sanitary Construction and Appliances is detrimental to sanitary progress and injurious to the health of the people, and should therefore, be amended. That it is desirable that the Local Government Board

should after consultation, frame a model set of Rules and Regulations.

2. That it is important that every Sanitary Inspector should have a practical knowledge of building construction, for the reason that as his duty is to see the work properly carried out ; he cannot fulfil this duty unless he has the trade technical knowledge.

That this decision be communicated to the Local Government Board.

3. The want of uniformity is deeply regretted in the decisions given by Judges and Magistrates, and it is believed that the only remedy is the appointment by Government of a Special Tribunal which should deal with all the questions of building construction and sanitary appliances, and all cases which arise out of building.

4. That the Congress desire to call the attention of the Board of Trade to the fact that while cattle trucks are bound to have periodical cleansings, yet carriages for human beings are outside its control.

Having regard to recent scientific investigations, the Congress suggests some rules should be framed to bring railway carriages under at least as much sanitary control as sheep and cattle now have.

5. That advantages will be attendant upon the adoption of certain standards of purity of Sewage Effluents framed to meet the various conditions under which these effluents are delivered, and that the Local Government Board be invited to fix such standards.

The importance and practical character of the meeting of the **Sanitary Institute** held in Liverpool may be judged from the titles of some of the papers given during the Congress.

1. The origin of Typhoid Fever.
2. The spread of Typhoid Fever by Sewers.
3. Infantile Mortality and Female Labour.
4. The position of the study of Industrial Diseases.
5. Purification of air emitted from Infectious Hospitals.

6. Protection of the Health of Female Workers.
7. Town Smoke.
8. Housing of the Working Classes.
9. Disposal of Town and other Refuse by burning.
10. Slop Closets and Sewage Disposal.
11. Tub and Pail System.

This last paper is so interesting to a pail town like Huddersfield that the following extract is interesting.

“Most of the towns which have adopted this system are not pressing the erection of the tub and pail closets at the present time, but are turning their attention very seriously to the question of water carriage, either by the use of the trough or of the waste water or fresh water closet, and the opinion generally appears to have again turned in favour of water carriage, doubtless the cheapest possible manner of conducting the sewage to any given point ; and this is more especially the case in those towns where a sewerage system has just been completed or is now being carried out. The tub and pail system is also considered by all to be a most expensive system, and one which does not give resultant benefits in comparison to the excessive cost in carrying it out in a proper and efficient manner.

The author is of opinion that the tub and pail system has in addition to the reduction of the death-rate, undoubtedly resulted in benefit to the community as against the old midden system, but that the question of cost is so serious, that no large town is now likely to undertake the adoption of the system.

Taking it as a whole he considers it has not been the success that was expected, although it may be still effectively adopted as an intermediate system in towns which are rapidly increasing, and which are not yet in a position to carry out a complete water carriage system.

In conclusion the author is of opinion the advantages and disadvantages of the system are as follows, namely :—

ADVANTAGES.

1. That it has been, and is likely to be, beneficial as an intermediate system between the midden and water carriage, enabling Corporations as it does to give more time to the questions of sewerage, and to make experiments as to the best mode of dealing with the excreta under the varied circumstances of each town.

2. That it is an immense stride in advance of the midden system. The excreta is removed more easily, more frequently, and with less nuisance, and there is no risk of its percolating into the surrounding ground, and polluting both soil and air.

3. That it may be of use in towns where an adequate water supply cannot be obtained readily or without excessive expenditure.

4. That it is well adapted to the wants of sparsely populated districts, and especially villages, whose water supply is taken from wells, and where the excreta would be utilized on the spot as a manure.

DISADVANTAGES.

1. That the great questions of cost, both in the carriage of the pails and dealing with the excreta, is such that in large towns the system cannot be carried on with advantage.

2. That there are great difficulties in the way of its being carried out in a proper manner and without creating a nuisance.

3. That being a conservancy system it is not the best mode of dealing with the excreta independent of the question of cost.

4. That in the event of its introduction, nothing is ultimately saved in the construction of a system of sewerage and very little annual cost in the carrying on of outfall works.

And generally, that the system is now dying out and will again give place to a water carriage system, which is certainly the cheapest and best mode of carriage at present possible."



TABLE I.

Return of Births and Deaths Registered during the thirteen weeks ended March 31st, 1894.

DISTRICTS.	Census Population, 1891.	Estimated Population at the middle of the year 1894.	Births Registered during the 13 weeks ended 31st March, 1894	Deaths Registered during the 13 weeks ended 31st March, 1894	INFANTILE MORTALITY					SEVEN ZYMOTIC DISEASES.								All other Diseases.	Rate of Mortality per 1000								
					Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	Persons aged 50 years and upwards.	Smallpox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers			Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	During the corresponding period year previous.	During the 13 weeks ended 31st March, 1894			
																Typhoid	Other								Diarrhoea.		
Huddersfield (Central)	25,909	26,445	163	105	23	5	1	2	...	45	...	1	...	1	1	...	3	12	13	10	4	60	18.63	15.94	0.46	0.91*	
Marsh	8,330	8,620	42	39	9	2	...	...	...	18	...	...	...	...	...	1	1	5	9	1	3	19	18.85	18.16	1.88	0.93
Fartown	9,584	9,833	55	29	6	...	1	1	1	6	...	1	...	...	...	...	...	2	5	2	1	17	12.41	11.84	0.83	0.82†
Deighton and Bradley	2,273	2,366	12	11	3	...	...	...	...	4	...	...	...	...	...	...	...	2	1	1	...	7	22.13	18.66	1.70	...
Dalton	8,413	8,811	53	51	21	3	...	1	...	9	...	...	...	...	3	1	...	5	13	2	2	25	16.21	23.23	0.46	1.82
Almondbury	14,856	15,220	83	55	12	2	...	1	...	24	...	...	...	1	1	...	...	6	19	3	2	23	19.14	14.50	...	0.53
Lockwood	12,076	12,504	68	66	11	4	3	...	...	21	...	...	...	2	2	1	...	14	15	4	5	23	16.87	21.18	1.62	1.60†
Lindley	8,575	8,965	38	30	9	3	3	...	1	10	...	...	...	...	...	...	...	4	11	2	2	11	9.53	13.43	...	...
Longwood	5,406	5,747	34	26	2	2	...	...	...	11	...	...	...	...	1	...	...	...	2	2	...	21	15.43	18.16	...	0.70
Infirmary (Central) ...	...	...	...	10	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	1	...	9	...	...	...	...
Hospital (Fartown) ...	...	...	...	6	...	1	...	2	1	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...
Workhouse (Lockwood)	...	...	2	21	...	1	1	...	...	13	...	...	...	...	...	...	1	4	1	1	13	...	...	...	...	...
Borough	95,422	98,511	550	449	96	23	9	10	3	166	8	4	9	2	1	5	54	89	29	20	228
Rate per 1000 of Estimated Population...	...	...	22.41	18.29	...	...	...	...	...	...	...	0.32	0.16	0.37	0.08	0.04	0.20	2.20	3.63	1.18	0.81	9.29	18.27	18.29	0.90	1.18

* Central, with Infirmary, 17.45.

Deaths of Children under one year per 1000 births, 175.

† Fartown, with Fever Hospital, 14.29.

Death Rate of 33 large English towns, 20.96.

Birth Rate of 33 large English towns, 31.99.

† Lockwood, with Workhouse, 27.93.

Zymotic Death Rate of 33 large English towns, 2.41.

TABLE II.

Return of Births and Deaths Registered during the thirteen weeks ended June 30th, 1894.

DISTRICTS.	Census Population, 1891.	Estimated Population at the middle of the year 1894.	Births registered during the 13 weeks ended 30th June, 1894	Deaths registered during the 13 weeks ended 30th June, 1894	INFANTILE MORTALITY.					Persons aged 50 years and upwards.	SEVEN ZYMOTIC DISEASES.								All other Diseases.	Rate of Mortality per 1000.							
					Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.		Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers			Phthisis.		Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	During the corres- ponding period.	During the 13 weeks ended 30th June, 1894	During the corres- ponding period.	Seven Zymotics	
															Typhoid.	Other.	Diarrhoea.										
Huddersfield (Central)	25,909	26,445	116	82	14	5	2	3	2	29	...	...	1	1	1	...	...	...	5	19	5	3	46	15.12	12.44	1.07	0.61*
Marsh	8,330	8,620	30	39	5	3	2	...	...	15	...	...	...	1	2	...	...	...	5	6	4	2	18	12.72	18.16	0.47	1.86
Fartown	9,584	9,833	38	24	4	...	...	...	...	11	...	...	4	...	...	...	...	...	...	5	1	2	12	18.62	9.80	0.41	1.63†
Deighton and Bradley	2,273	2,366	8	6	...	...	...	...	...	4	...	...	...	...	...	...	...	...	1	1	1	...	3	17.02	10.18	...	...
Dalton	8,413	8,811	40	33	8	6	1	...	...	5	...	...	...	...	6	1	...	...	2	8	2	...	14	17.13	15.03	...	3.19
Almondbury	14,856	15,220	70	51	8	1	2	2	...	25	...	...	1	2	2	1	...	...	7	11	3	7	19	15.16	13.45	1.06	1.05
Lockwood	12,076	12,504	74	54	14	6	...	1	...	15	...	2	...	2	4	...	...	...	7	12	2	1	24	17.84	17.33	0.65	2.57†
Lindley	8,575	8,965	34	30	7	1	1	1	...	14	...	...	...	1	1	...	...	...	5	4	1	3	15	9.53	13.43	0.45	0.89
Longwood	5,406	5,747	27	22	7	1	...	...	...	5	...	...	...	...	3	...	...	...	1	4	1	1	10	21.03	15.36	0.70	3.49
Infirmary (Central) ...	...	...	...	13	1	1	...	1	...	4	...	...	...	...	...	...	...	...	...	1	2	...	10	...	...	...	...
Hospital (Fartown) ...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Workhouse (Lockwood)	...	...	7	20	...	...	...	...	...	17	...	...	...	...	...	...	...	...	2	3	2	...	12	...	...	...	...
Borough	95,422	98,511	444	375	68	24	8	9	3	144	...	2	2	10	19	3	1	2	35	74	24	20	183	...	...	...	...
Rate per 1000 of Esti- mated Population ...	...	...	18.09	15.28	...	...	...	...	...	...	0.08	0.08	0.41	0.77	0.12	0.04	0.08	1.43	3.01	0.98	0.81	7.46	17.28	15.28	0.99	1.59	

* Central, with Infirmary, 14.42.

† Fartown, with Fever Hospital, 10.20.

‡ Lockwood, with Workhouse, 23.75.

Deaths of Children under one year per 1000 births, 153.

Death Rate of 33 large English towns, 17.43.

Zymotic Death Rate of 33 large English towns, 2.55.

Birth Rate of 33 large English Towns, 30.43.

TABLE III.

Return of Births and Deaths Registered during the thirteen weeks ended September 29th, 1894.

DISTRICTS.	Census Population, 1891.	Estimated Population at the middle of the year, 1894.	Births Registered during the 13 weeks ended 29th Sept., 1894	Deaths Registered during the 13 weeks ended 29th Sept., 1894	INFANTILE MORTALITY.					SEVEN ZYMOTIC DISEASES.										Rate of Mortality per 1000.							
					Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	Persons aged 50 years and upwards.	Small Pox.	Measles.	Scarlatina	Diphtheria	Whooping Cough.	Fevers		Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	All other Diseases.	During the corresponding period year previous.	During the 13 weeks ended 29th Sept., 1894	All Causes.	Seven Zymotics	Rate of Mortality per 1000.
																Typhoid.	Other.										
Huddersfield (Central)	25,909	26,445	151	79	16	4	5	2	...	26	...	3	2	...	1	...	2	14	7	4	2	44	15.88	11.99	2.44	1.21*	
Marsh	8,330	8,620	42	25	5	1	1	1	...	6	...	...	...	...	...	...	1	5	7	1	1	9	11.78	11.64	2.36	0.93
Fartown	9,584	9,833	41	29	4	1	...	1	...	8	...	...	1	1	...	...	1	6	3	...	1	16	15.31	11.84	2.07	1.22†
Deighton and Bradley	2,273	2,366	5	9	2	...	1	...	...	3	...	...	1	...	...	...	...	...	...	...	...	7	15.32	15.27	1.70	1.70
Dalton	8,413	8,811	47	31	6	...	1	...	11	...	...	...	...	...	...	...	...	3	6	5	2	14	13.89	14.12	2.31	0.45
Almondbury	14,856	15,220	70	62	11	3	4	...	21	...	...	...	4	7	...	...	2	7	7	6	5	24	15.69	16.35	2.39	3.43
Lockwood	12,076	12,504	57	26	6	1	...	...	11	...	...	...	...	3	...	...	...	2	2	3	3	14	13.62	8.35	1.30	0.96†
Lindley	8,575	8,965	43	20	3	...	1	...	8	...	1	...	...	1	...	...	...	2	1	5	...	10	14.52	8.95	1.36	0.89
Longwood	5,406	5,747	26	12	2	1	...	...	8	...	...	...	...	...	...	...	...	2	1	1	1	7	16.13	8.38	4.91	...
Infirmary (Central) ...	...	...	...	12	...	1	...	...	4	...	...	...	...	...	...	...	...	...	3	2	1	6	...	...	...	...
Hospital (Fartown) ...	...	...	...	3	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Workhouse(Lockwood)	...	...	2	18	...	...	...	...	11	...	...	...	...	...	...	...	...	2	2	3	...	11	...	...	...	...
Borough	95,422	98,511	484	326	55	13	15	7	3	117	...	4	4	8	13	1	6	42	39	30	17	162	...	...	...	...
Rate per 1000 of Estimated Population ...	...	...	19.72	13.28	...	...	...	...	...	...	0.16	0.16	0.32	0.53	0.04	...	0.24	1.71	1.59	1.22	0.69	6.60	16.46	13.28	2.59	1.47

* Central, with Infirmary, 13.81.
Deaths of Children under one year per 1000 births, 114.

† Fartown, with Fever Hospital, 13.06.
Death Rate of 33 large English towns 16.38.
Birth Rate of 33 large English towns, 29.85.

† Lockwood, with Workhouse, 14.12.
Zymotic Death Rate of 33 large English towns, 2.78.

TABLE IV.

Return of Births and Deaths Registered during the thirteen weeks ended December 29th, 1894.

DISTRICTS.	Census Population, 1891.	Estimated Population at the middle of the year, 1894.	Births Registered during the 13 weeks ended 29th Dec., 1894	Deaths Registered during the 13 weeks ended 29th Dec., 1894	INFANTILE MORTALITY.					SEVEN ZYMOTIC DISEASES.										Rate of Mortality per 1000.					
					Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	Persons aged 50 years and upwards.	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough	Fevers		Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	All other Diseases.	All Causes.		Seven Zymotics
																Typhoid.	Other.						During the corre- sponding period year previous.	During the 13 weeks ended 29th Dec., 1894	
Huddersfield (Central)	25,909	26,445	147	110	29	8	5	4	..	35	..	..	1	8	2	5	26	8	4	54	17.01	16.69	0.61	1.97*
Marsh	8,330	8,620	50	37	8	3	2	2	..	14	..	..	..	1	..	..	7	3	5	15	11.92	17.23	0.94	1.86
Fartown	9,584	9,833	36	31	9	1	1	..	1	12	..	1	..	1	..	..	3	4	2	14	17.09	12.65	0.41	0.82†
Deighton and Bradley	2,273	2,366	7	9	1	2	..	..	..	5	..	..	..	1	..	..	1	1	1	4	3.46	15.27	...	3.39
Dalton	8,413	8,811	58	31	7	1	2	..	..	11	3	1	..	..	..	..	7	1	3	15	17.86	14.12	0.46	1.82
Almondbury	14,856	15,220	68	61	18	3	1	3	..	17	..	..	1	2	..	..	15	7	2	22	12.88	16.09	1.06	1.05
Lockwood	12,076	12,504	71	54	15	6	4	..	1	14	2	1	..	1	..	1	4	4	4	21	17.81	17.33	0.65	2.25†	
Lindley	8,575	8,965	52	30	6	..	..	1	..	7	1	..	..	..	..	..	5	5	..	15	21.18	13.43	1.36	0.45
Longwood	5,406	5,747	18	16	6	..	..	..	..	6	..	..	..	..	1	..	4	4	1	8	6.38	11.17	2.80	0.70
Infirmary (Central) ..	...	...	...	13	...	...	...	1	..	7	..	..	..	..	..	..	1	..	3	9	...	...	...	...
Hospital (Fartown) ..	...	...	...	7	...	...	2	1	1	7	..	6	..	..	1	..	..	..	..	...	...	...	...	...
Workhouse(Lockwood)	...	...	3	14	...	...	...	...	...	7	..	..	..	..	..	..	5	4	..	5	...	...	...	...
Borough	95,422	98,511	510	413	99	24	16	13	4	135	7	9	5	14	5	...	84	37	25	182	...	...	...	...
Rate per 1000 of Esti- mated Population ...	...	...	20.78	16.83	...	...	...	...	...	...	0.28	0.37	0.20	0.57	0.20	...	3.42	1.50	1.02	7.41	17.73	16.83	1.15	1.83

* Central, with Infirmery, 18.67.
Deaths of Children under one year per 1000 births, 194.

† Fartown, with Fever Hospital, 15.51.
Death Rate of 33 large English towns, 17.76.
Birth Rate of 33 large English towns, 30.74.

† Lockwood, with Workhouse, 21.83.
Zymotic Death Rate of 33 large English towns, 1.97.

TABLE V.

Return of Births and Deaths Registered during the fifty-two weeks ended December 29th, 1894.

DISTRICTS.	Census Population 1891.	Estimated population at the middle of the year 1894.	Births Registered during the 52 weeks ended December 29th, 1894	Deaths Registered during the 52 weeks ended Dec. 29th, 1894.	INFANTILE MORTALITY.					SEVEN ZYMOTIC DISEASES.										Rate of Mortality per 1000.										
					Under 1 year.	1 and under 2 years.	2 and under 3 years.	3 and under 4 years.	4 and under 5 years.	Persons aged 50 years and upwards.	Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fevers		Diarrhoea.	Phthisis.	Bronchitis, Pneumonia and Pleurisy.	Heart Disease.	Cancer.	All other Diseases.	During the corresponding period year previous.	During the 52 weeks ended Dec. 29th, 1894.	All Causes.	Seven Zymotics			
																Typhoid.	Other.										During the corresponding period year previous.	During the 52 weeks ended Dec. 29th, 1894.	During the corresponding period year previous.	During the 52 weeks ended Dec. 29th, 1894.
Huddersfield (Central)	25,909	26,445	577	376	82	22	13	11	..	135	..	3	1	4	10	4	1	8	36	65	27	13	204	16.46	14.27	1.14	1.18*			
Marsh	8,330	8,620	164	140	27	9	5	3	2	53	..	..	..	1	5	1	..	2	18	29	9	11	61	13.67	16.30	1.41	1.40
Fartown	9,584	9,833	170	113	23	2	2	2	3	37	..	..	..	..	2	..	..	2	14	16	7	6	59	15.52	11.53	0.83	1.12†
Deighton and Bradley	2,273	2,366	32	35	6	2	1	..	..	16	..	..	..	..	1	..	..	..	3	3	3	2	21	15.32	14.84	0.85	1.27
Dalton	8,413	8,811	198	146	42	10	5	2	1	36	..	3	2	..	9	1	1	..	11	34	10	7	68	15.65	16.63	0.81	1.82			
Almondbury	14,856	15,220	291	229	49	9	7	6	2	87	..	1	..	7	12	1	..	2	31	52	19	16	88	16.49	15.10	1.06	1.52			
Lockwood	12,076	12,504	270	200	46	17	7	1	..	61	..	4	1	4	10	3	..	1	26	43	13	13	82	16.63	16.05	0.97	1.85†			
Lindley	8,575	8,965	167	110	25	4	5	4	2	39	..	2	..	..	2	..	..	1	16	20	13	5	51	13.28	12.31	0.79	0.56
Longwood	5,406	5,747	105	76	17	4	..	4	..	30	..	..	1	1	4	..	..	1	3	9	8	3	46	17.35	13.27	2.63	1.22
Infirmery (Central) ..	..	..	..	48	1	2	..	2	..	20	..	..	..	..	..	..	..	..	..	5	5	4	34	..	..	..	..
Hospital (Fartown) ..	..	..	..	17	..	1	2	4	3	..	..	..	16	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Workhouse (Lockwood)	..	..	14	73	..	2	1	..	..	48	..	..	..	..	..	..	..	1	13	10	6	2	41	..	..	..	..
Borough	95,422	98,511	1988	1563	318	84	48	39	13	562	..	13	23	27	55	11	2	18	171	286	120	82	755	..	..	..	..
Rate per 1000 of Estimated Population ...	..	..	20.25	15.92	..	..	..	..	..	..	0.13	0.23	0.27	0.56	0.11	0.02	0.18	1.74	2.91	1.22	0.83	7.69	17.43	15.92	1.38	1.52	

* Central, with Infirmery, 16.09. † Fartown, with Fever Hospital, 13.27. † Lockwood, with Workhouse, 21.91.
Deaths of Children under one year per 1000 births, 160. Death Rate of 33 large English towns, 18.13. Zymotic Death Rate of 33 large English towns, 2.43
Birth Rate of 33 large English towns, 30.75.

Classification of Deaths Registered during the 52 weeks ended December 29th, 1894.

	Central Hud- dersfield	Marsh	Fartown	Deighton and Bradley	Dalton	Almond- bury	Lock- wood	Lindley	Long- wood	In- firmary	Hospital	Work- house	Totals.	TOTAL FOR BOROUGH
	Under 5	Over 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	Under 5	
	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	Over 5	
Class I.—ZYMOTIC DISEASES.														
Order 1—Miasmatic														
1 Small Pox .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2 Measles	3	..	..	..	..	..	..	..	..	..	..	..	..	13
3 Scarlet Fever	1	..	1	..	..	..	..	..	..	..	6	..	1	23
4 Diphtheria	4	3	3	..	..	1	3	..	1	..	..	..	9	27
5 Whooping Cough	9	2	2	1	..	12	1	2	4	..	..	..	8	55
6 Simple Continued and Ill-D. F. (Typhus) .....	..	..	..	..	1	..	3	..	..	..	1	..	2	2
7 Enteric or Typhoid Fever .....	..	1	..	..	1	..	..	..	..	..	..	..	11	11
8 Other Miasmatic Diseases .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Order 2—Diarrhoeal	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Diarrhoea Dysentery	4	2	2	..	..	1	1	1	..	..	..	1	12	18
Order 3—Malarial Influenza	1	2	..	..	..	4	1	..	3	..	..	..	10	11
Order 4—Venereal .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Syphilis	1	..	..	1	..	2	..	..	..	..	..	..	5	5
Order 5—Septic .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Erysipelas	2	1	..	..	..	..	..	1	..	..	..	1	1	5
2 Pyæmia, Septicæmia	1	..	1	..	1	..	2	1	..	..	..	1	6	6
3 Puerperal Fever	1	..	..	..	..	..	..	..	1	..	..	..	2	2
II.—PARASITIC DISEASES	..	..	..	..	..	..	..	..	..	..	..	..	..	..
III.—DIETIC DISEASES	1	..	1	..	..	..	..	..	..	..	..	..	2	2
IV.—CONSTITUTIONAL DISEASES.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Rheumatic Fever, Rheu. Heart	2	..	1	..	1	2	1	1	2	..	..	..	10	10
2 Rheumatism	3	..	..	..	..	..	2	..	..	..	..	..	4	7
3 Gout	1	..	..	..	..	..	..	..	..	..	..	..	1	1
4 Cancer, Malignant Disease	13	10	6	2	7	16	13	5	3	4	..	2	81	82
5 Tabes Mesenterica	2	1	1	..	1	1	1	2	..	6	..	..	1	7
6 Tubercular Meningitis, &c.	8	1	14	3	9	30	25	16	3	1	..	13	11	26
7 Phthisis	1	17	..	..	1	1	1	..	..	..	..	1	6	171
8 Other forms of Tuberculosis, &c. ....	..	2	..	..	1	..	4	1	1	..	..	..	2	8
9 Glycosuria, Diabetes Mellitus	5	1	2	..	1	1	..	..	..	..	..	1	6	13
10 Other Constitutional Diseases	1	1	1	..	2	1	..	..	..	..	..	1	5	13
V.—DEVELOPMENTAL DISEASES.	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Premature Birth	8	2	4	1	4	5	9	4	3	..	..	..	40	40
2 Congenital Malformations .....	..	2	..	..	1	5	4	1	..	..	..	..	13	14
3 Old Age	20	4	6	3	3	..	6	2	8	..	..	16	73	73

2 Apoplexy, &c.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
3 Hemiplegia	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
4 Epilepsy	13	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
5 Convulsions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
6 Laryngismus Stridulus	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
7 Disease of Spinal Cord, &c.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
8 Other Diseases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Order 2—Organs of Special Sense	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Order 3—Circulatory System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1 Pericarditis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
2 Acute Endocarditis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
3 Valvular Diseases of Heart	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
4 Other Diseases of Heart	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
5 Aneurism	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
6 Embolism. Thrombosis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Order 4—Respiratory System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1 Laryngitis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
2 Croup	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
3 Emphysema. Asthma	15	22	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
4 Bronchitis	13	15	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
5 Pneumonia	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
6 Pleurisy	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Other Diseases of Respiratory System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Order 5—Digestive System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
1 Dentition	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
2 Sore Throat. Quinsy	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
3 Diseases of Stomach	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
4 Enteritis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
5 Obstructive Disease of Intestine	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
6 Peritonitis	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
7 Ascites	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
8 Cirrhosis of Liver	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
9 Jaundice, &c.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
10 Other Diseases of Digestive System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
Order 6—Lymphatic System	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38													

TABLE VI.—Continued.

	Central Hud- dersfield		Marsh		Fartown		Deight'n and Bradley		Dalton		Almond- bury		Lock- wood		Lindley		Long- wood		In- firmary		Hospital		Work- house		Totals		TOTAL FOR BOROUGH
	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	Under 5	Over 5	
Order 9—Bones and Joints.....	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	4	..	4
Order 10—Integumentary System .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VII.—DEATHS FROM VIOLENCE	1	4	..	3	..	3	1	..	2	..	2	1	..	1	..	..	..	..	6	1	..	..	2	..	22	..	24
Order 1—Accident or Negligence.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Order 2—Homicide .....	..	5	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Order 3—Suicide.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	..	14
VIII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1 Dropsy.....	22	3	5	1	1	..	2	..	5	..	4	1	..	1	..	1	..	7	1	..	..	..	1	..	50	4	54
2 Debility, Atrophy, Inanition .....	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	2	..	5	5	5
3 Mortification .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	2
4 Tumour .....	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	1	1
5 Abscess .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6 Hæmorrhage .....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7 Sudden Death .....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1
8 Causes not specified or Ill-defined	7	12	..	..	1	..	3	..	6	1	2	6	4	..	..	..	2	..	..	..	..	..	1	..	21	27	48
TOTALS	128	248	46	94	32	81	9	26	60	86	73	156	71	129	40	70	25	51	5	43	10	7	3	70	502	1061	1563
TOTALS AT ALL AGES.....	376		140		113		35		146		229		200		110		76		48		17		73		1563		

TABLE VII.

Death Rate per 1,000 per annum for 1894 and fifteen previous years.

	Estimated Population at the middle of the Year.	From all causes and at all ages.	Children under 1 year	Children over 1 year and under 5 years.	In persons aged 50 years and upwards.	ZYMOTIC DISEASES.							Seven Zymotic Diseases.	Violence and Accidents.	Consumption and Diseases of the Breathing organs
						Smallpox.	Measles.	Scarlet Fever	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.			
1894	98,511	15.92	3.24	1.87	5.72	...	0.13	0.23	0.27	0.56	0.11	0.18	1.52	0.39	4.65
1893	97,552	17.43	3.34	2.00	6.66	0.02	0.26	0.26	0.03	0.13	0.14	0.53	1.38	0.37	5.42
1892	96,599	18.14	3.49	2.56	6.89	0.01	0.71	0.19	0.07	0.30	0.06	0.19	1.53	0.48	5.69
1891	95,656	22.96	4.51	3.50	8.62	...	1.12	0.31	0.05	0.62	0.16	0.11	2.38	0.66	7.64
1890	94,253	18.84	3.83	2.19	7.02	0.01	0.04	0.07	0.05	0.42	0.25	0.39	1.23	0.48	6.58
1889	92,825	18.79	4.15	2.78	6.33	...	0.98	0.28	0.13	0.16	0.11	0.36	2.02	0.38	5.95
1888	91,419	18.51	3.90	2.80	6.37	0.02	0.36	0.29	0.15	0.41	0.13	0.19	1.55	0.65	5.40
1887	90,034	22.99	5.06	4.42	6.70	...	1.39	0.35	0.46	0.68	0.10	0.41	3.39	0.51	7.26
1886	88,670	19.54	4.49	2.76	6.30	...	0.19	0.37	0.14	0.32	0.14	0.48	1.63	0.79	6.38
1885	87,327	20.05	4.62	2.84	6.79	...	0.65	0.13	0.05	0.29	0.11	0.20	1.42	0.74	6.50
1884	86,004	19.54	4.84	2.55	6.34	...	0.18	0.08	0.05	0.70	0.14	0.63	1.77	0.57	5.65
1883	84,450	21.38	5.14	3.09	6.52	...	0.39	0.08	0.04	0.55	0.18	0.44	1.68	0.58	7.65
1882	83,271	22.39	5.64	3.93	6.60	...	0.96	0.26	0.07	0.64	0.18	0.53	2.63	0.65	6.81
1881	82,113	20.35	4.67	2.82	6.54	...	0.09	0.21	0.04	0.42	0.13	0.38	1.26	0.75	6.50
1880	81,780	22.04	5.20	3.79	6.66	0.02	0.40	0.28	0.05	0.15	0.67	0.91	2.49	0.61	6.72
1879	80,245	22.95	4.87	4.50	6.92	...	0.56	1.10	0.09	0.41	0.28	0.34	2.78	0.66	7.64

The populations for 1884 to 1894 are those estimated by the Registrar-General, by geometrical progression. The populations for 1883, 1882, and 1881 are estimated by arithmetical progression, the two latter from the first published returns of the census of 1881. The populations of the earlier years are those estimated for those years at the time. The death-rates for 1880 are therefore probably one per cent., and those for 1879 0.5 per cent. too low. See Annual Report for 1882, p. 4, 5, note and p. 10 note, for 1883, p. 29, and for 1888, p. 16.

TABLE VIII.

DISTRICTS	Birth-rate	Mortality per 1,000 Persons Living at all Ages.														Total from all Causes.		
		Children under 1 year.	1 to 5 years	Adults over 50 years.	Seven Zymotic Diseases.	Constitutional Diseases (including Phthisis)	Phthisis	Developmental Diseases.	Diseases of the Nervous System.	Diseases of the Circulatory System.	Diseases of the Respiratory System.	Digestive System.	Diseases of the Urinary System.	Diseases of the Reproductive System.	Violence.		Ill-defined and not Specified Causes.	Other Causes.
Central (with Infirmary)	21·89	3·15	1·89	5·88	1·18	3·24	1·36	1·06	2·39	1·21	1·73	0·82	0·68	0·04	0·78	1·82	0·30	16·09
Central (without Infirmary).....	21·89	3·11	1·75	5·12	1·18	2·88	1·36	1·06	2·05	1·02	1·54	0·45	0·45	0·04	0·38	1·75	0·27	14·27
Marsh	19·09	3·14	2·21	6·17	1·40	3·96	2·09	1·05	2·09	1·05	3·72	1·05	0·12	0·35	0·35	0·81	0·35	16·30
Fartown (with Fever Hospital)	17·35	2·35	1·94	3·77	2·86	2·65	1·43	1·02	2·24	0·71	1·73	0·82	0·41	...	0·41	0·20	0·20	13·27
Fartown (without Fever Hospital) ...	17·35	2·35	0·92	3·77	1·12	2·65	1·43	1·02	2·24	0·71	1·73	0·82	0·41	...	0·41	0·20	0·20	11·53
Deighton and Bradley.....	13·57	2·54	1·27	6·78	1·27	2·12	1·27	1·70	2·12	1·27	1·70	0·42	0·85	...	1·27	2·12	...	14·84
Dalton	22·55	4·78	2·05	4·10	1·82	2·85	0·13	0·91	1·94	1·25	4·10	1·25	0·23	0·23	0·23	1·37	0·45	16·63
Almondbury.....	19·18	3·23	1·58	5·74	1·52	3·76	2·04	0·99	1·25	1·32	3·49	0·52	0·46	0·26	0·26	0·86	0·39	15·10
Lockwood (with Workhouse)	22·79	3·69	2·25	8·75	1·93	5·38	3·13	2·81	2·57	1·52	4·33	0·80	0·72	0·08	0·32	1·04	0·48	21·91
Lockwood (without Workhouse)	21·67	3·69	2·01	4·89	1·85	3·93	2·09	1·52	1·77	1·04	3·53	0·48	0·64	0·08	0·16	0·72	0·32	16·05
Lindley	18·69	2·79	1·68	4·36	0·56	3·36	1·79	0·78	1·79	1·46	2·24	1·45	0·34	...	...	0·11	0·22	12·31
Longwood	18·33	2·97	1·40	5·24	1·22	1·57	0·52	1·92	1·22	1·40	1·75	1·05	0·52	0·17	...	1·75	0·70	13·27
Total for Borough, 1894	20·25	3·24	1·87	5·72	1·52	3·44	1·74	1·29	1·96	1·24	2·04	0·94	0·50	0·12	0·39	1·13	0·36	15·92
Do. for 1893	23·77	3·34	2·01	6·66	1·38	3·27	1·70	1·30	2·23	1·26	3·76	1·20	0·43	0·09	0·37	1·42	0·71	17·43

TABLE IX.

Cases of infectious diseases certified under the 64th clause of the Huddersfield Improvement Act, 1880, or heard of through others so certified and by private enquiries, during the four quarters of the 52 weeks of the year 1894.

A Cases of Small-pox, Scarlet Fever, Typhoid, and Typhus Fever.

	13 weeks ended March 31st, 1894.				13 weeks ended September 29th, 1894.				13 weeks ended December 29th, 1894.				52 weeks ended December 29th, 1894.			
	Cases heard of.	Admitted to Hospital.	Total deaths in Borough.	Deaths in Hospital.	Cases heard of.	Admitted to Hospital.	Total deaths in Borough.	Deaths in Hospital.	Cases heard of.	Admitted to Hospital.	Total deaths in Borough.	Deaths in Hospital.	Total cases reported or heard of.	Admitted to Hospital.	Total deaths in Borough.	Deaths in Hospital.
Small pox.....	...	...	...	...	2	2	...	...	1	1	...	...	5	5	...	...
Scarlet fever	112	101	8	6	107	94	2	1	127	102	9	6	462	402	23	16
Typhoid fever	5	...	2	...	5	...	3	...	10	5	5	1	31	6	11	1
Typhus fever .....	...	...	...	...	1	...	1	...	...	...	...	...	1	...	1	...
The above 4 diseases.	117	101	10	6	115	96	6	1	138	108	14	7	499	413	35	17

B Other Diseases.

	1st Quarter		2nd Quarter		3rd Quarter		4th Quarter		TOTAL	
	Heard of	Hospital	Heard of	Hospital	Heard of	Hospital	Heard of	Hospital	Heard of	Hospital
Continued fever.....	1	...	...	...	...	...	...	...	1	...
Measles & Rötheln	1	...	...	...	...	...	17	...	25	...
Chicken-pox .....	...	...	...	...	...	...	...	...	1	...
Diphtheria	5	...	10	...	11	...	10	...	36	...
Puerperal Fever ...	...	...	1	...	...	...	1	...	2	...
Erysipelas	3	...	1	...	...	...	2	...	8	...
Other and doubtful	2	...	5	...	6	...	14	...	27	...

TABLI

JANUARY.					FEBRUARY.				MARCH.				1894.	
1st week ended January 6, 1894	2nd week ended January 13, 1894	3rd week ended January 20, 1894	4th week ended January 27, 1894	5th week ended February 3, 1894	6th week ended February 10, 1894	7th week ended February 17, 1894	8th week ended February 24, 1894	9th week ended March 3, 1894	10th week ended March 10, 1894	11th week ended March 17, 1894	12th week ended March 24, 1894	13th week ended March 31, 1894		
50	48	41	41	30	48	41	41	46	48	46	42	28	1	..... Total
29	46	46	42	33	38	35	34	30	24	27	31	34	2	Deaths at
9	11	8	4	10	9	8	7	3	9	8	4	6	3	
4	2	6	5	1	3	4	4	4	1	1	5	5	4	
4	2	4	6	4	4	3	1	4	3	2	5	3	5	
8	18	15	11	7	8	9	10	11	1	8	7	8	6	
1	3	3	1	2	2	4	3	3	1	2	2	2	7	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	Deaths from seven principal Zymotic Diseases.
1	1	2	.....	.....	.....	2	.....	2	.....	.....	.....	.....	9	
.....	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	10	
.....	1	.....	1	.....	1	1	1	.....	.....	1	1	2	11	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	13	
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	14	
.....	.....	.....	.....	2	.....	.....	1	1	.....	1	.....	.....	15	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	
13	10	12	9	7	3	3	6	5	3	4	8	6	17	Deaths from
1	8	4	8	4	4	4	1	3	4	5	5	3	18	
1	3	4	2	4	5	2	.....	2	1	1	1	3	19	
1	1	1	.....	.....	.....	2	1	.....	.....	2	.....	1	20	
5	4	4	2	1	4	3	2	2	3	4	2	1	21	
30·06	29·64	29·47	29·51	29·50	29·75	29·64	30·02	29·56	29·48	29·32	30·20	29·95	22	Mean Barom.
27·6	35·7	43·8	39·2	38·9	44·5	37·7	31·8	42·2	41·1	40·2	44·3	46·1	23	Mean Therm.
4·6	11·5	6·0	8·1	7·0	9·8	8·2	16·0	11·4	11·7	13·5	17·0	26·0	24	Mean diurnal
43°	43°	41°	42°	42°	42°	42°	42°	41°	41°	40°	40°	40°	25	Mean height
39°	38°	38°	38°	39°	40°	38°	37°	39°	39°	40°	41°	42°	26	"
78·0	76·0	77·0	70·0	76·0	80·0	75·0	76·0	79·0	72·0	63·0	62·0	48·0	27	Mean moisture
0·18	0·30	1·70	1·24	1·49	2·94	1·72	0·68	1·62	2·07	1·68	0·00	0·03	28	Total Rainfall
E.	S.E.	S.W.	S.W.	W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.W.	S.E.	29	Prevailing
28	30	28	53	49	58	59	37	43	40	34	10	12	30	Velocity of Wind
54°	78°	79°	82°	83°	93°	72°	78°	97°	88°	86°	92°	96°	31	Highest recorded
44°	53°	50°	51°	46°	53°	50°	43°	53°	52°	49°	58°	63°	32	"
7°	10°	38°	26°	27°	35°	26°	15°	33°	30°	30°	29°	30°	33	Lowest
5°	10°	35°	24°	25°	30°	24°	10°	30°	29°	25°	27°	28°	34	"
30	28	18	18	22	16	19	23	21	13	17	15	7	35	New Cases of and Home Cases notified as clause 64, H Hudd. district
10	13	15	10	18	8	9	9	13	8	6	6	4	36	
1068	1075	1156	1114	1133	1136	1117	1100	1105	1066	1146	1046	1081	37	
26·48	25·42	21·72	21·72	15·89	25·42	21·72	21·72	24·36	25·42	24·36	22·24	14·83	38	Per 1000 of population
15·36	24·36	24·36	22·24	17·48	20·13	18·54	18·01	15·89	12·71	14·30	16·42	18·01	39	
0·53	1·59	1·59	0·53	1·06	1·06	2·12	1·59	1·59	0·53	1·06	1·06	1·06	40	Death-rate per 1000 lvg.
6·89	5·30	6·35	4·77	3·71	1·59	1·59	3·18	2·65	1·59	2·12	4·24	3·18	41	
22·78	28·57	23·22	20·73	20·01	19·11	18·69	19·97	20·50	19·87	19·23	19·85	20·01	42	..... Death-rate
30·52	35·51	33·70	32·61	32·95	32·59	31·68	31·36	31·19	13·71	31·97	30·31	29·78	43	..... Birth-rate

X.

52 weeks.		APRIL.				MAY.						JUNE.			
		14th week ended April 7, 1894	15th week ended April 14, 1894	16th week ended April 21, 1894	17th week ended April 28, 1894,	18th week ended May 5, 1894	19th week ended May 12, 1894.	20th week ended May 19, 1894	21st week ended May 26, 1894	22nd week ended June 2, 1894	23rd week ended June 9, 1894	24th week ended June 16, 1894	25th week ended June 23, 1894	26th week ended June 30, 1894	
Births	1	51	30	39	32	41	35	32	27	20	29	30	40	38	
All Ages	2	27	22	31	26	26	29	32	41	34	29	27	26	25	
Under 1 year.....	3	6	3	5	7	11	4	7	7	6	3	3	2	4	
1 to 5 years	4	5	2	5	2	2	3	3	7	5	1	3	2	4	
50 to 60 years ...	5	3	3	4	1	2	4	4	3	2	4	3	3	5	
60 yrs. & upwards	6	6	9	8	6	5	10	9	10	7	15	6	10	2	
Seven diseases ...	7	3	2	5	3	4	4	3	5	2	1	2	3	2	
Smallpox	8														
Measles	9			1										1	
Scarlet Fever...	10		1		1										
Diphtheria	11	1	1	2		2	1	1				1	1		
Whooping Cough.	12	2		1	1	2	2	1	4	2		1	2	1	
Contd. { Typhus..	13			1											
Fever { Typhoid.	14				1				1		1				
Other&c.	15														
Diarrhoea	16						1	1							
Lung disease, &c.	17	6	6	4	5	4	4	6	11	8	6	7	5	2	
Consumption	18		3	2	3	6	1	2	2	6		3	2	5	
Heart disease, &c.	19	3	2	3	2		2	2	2	1	2	2	2	1	
Violence, &c.	20			1			2				2	1	2		
Institutions	21	4	1	4	2	2	3		3	3	5	2	4	1	
Inches)	22	29.94	29.74	29.65	29.55	29.90	29.64	29.97	29.97	29.55	29.75	29.73	29.83	30.14	
° F.	23	47.7	49.7	49.9	47.2	47.2	49.9	50.8	44.2	46.2	51.0	54.7	56.4	62.2	
Range ° F.	24	16.0	17.0	19.0	19.0	14.0	15.0	12.0	21.0	16.0	10.4	13.4	19.4	21.0	
Earth Ther. 4ft. 6in	25	42°	43°	44°	45°	45°	45°	46°	46°	47°	47°	43°	48°	50°	
„ „ 2ft. 6in	26	44°	45°	46°	46°	47°	47°	48°	48°	49°	49°	51°	51°	55°	
of Air, %.....	27	62.0	81.0	57.0	54.0	60.0	55.0	62.0	46.0	47.0	75.0	60.5	57.0	50.0	
(inches)	28	0.54	0.78	0.67	0.23	0.35	0.70	0.32	0.07	1.00	1.93	0.18	0.25	0.00	
Wind	29	S. E.	S. E.	S. E.	S. E.	N. W	W.	N. E.	N. E.	N. E.	S. E.	W N W	S. W.	S. E.	
miles per hour ...	30	14	14	12	24	32	31	20	20	29	20	25	12	15	
Temp. in the sun	31	108°	109°	107°	108°	109°	109°	107°	102°	106°	104°	105°	111°	114°	
„ „ shade	32	67°	68°	61°	61°	61°	60°	64°	67°	66°	62°	68°	71°	79°	
„ „ night	33	35°	37°	28°	34°	32°	38°	39°	28°	37°	39°	46°	44°	47°	
„ „ grass	34	33°	35°	27°	33°	30°	36°	37°	27°	35°	36°	44°	42°	46°	
Sickn's, Paupers }															
Patients	35	37	18	14	14	18	16	14	23	15	22	25	14	9	
Infectious under }															
I. Act	36	6	12	11	11	12	8	7	10	16	8	9	15	15	
Paupers relieved..	37	1051	1069	1080	1099	1020	1074	1067	1095	1098	1096	1089	1083	1075	
Birth-rate	38	27.01	15.89	20.66	16.95	21.72	18.54	16.95	14.30	10.59	15.36	15.89	21.19	20.13	
Death-rate	39	14.30	11.65	16.42	13.77	13.77	15.36	16.95	21.72	18.01	15.36	14.30	13.77	13.24	
Seven Zymotics..	40	1.59	1.06	2.65	1.59	2.12	2.12	1.59	2.65	1.06	0.53	1.06	1.59	1.06	
Breathing Organs	41	3.18	3.18	2.12	2.65	2.12	2.12	3.18	5.83	4.24	3.18	3.71	2.65	1.06	
33 English towns	42	14.30	11.65	16.42	13.77	13.77	15.36	16.95	21.72	18.01	15.36	14.30	13.77	13.24	
„ „	43	33.97	31.63	30.32	30.36	30.98	31.09	26.48	31.51	30.21	29.47	30.36	29.23	29.98	

TABLE

JULY.				AUGUST.					SEPTEMBER.				1894.	
27th week ended July 7, 1894	28th week ended July 14, 1894	29th week ended July 21, 1894	30th week ended July 28, 1894	31st week ended August 4, 1894	32nd week ended August 11, 1894	33rd week ended August 18, 1894	34th week ended August 25, 1894	35th week ended September 1, 1894	36th week ended September 8, 1894	37th week ended September 15, 1894	38th week ended September 22, 1894	39th week ended September 29, 1894		
46	28	38	34	38	47	35	41	40	37	44	27	29	1	Total
26	20	23	31	26	29	26	23	28	19	25	24	26	2	Deaths at
4	1	5	9	.....	8	7	5	3	3	5	.....	5	3	
2	3	3	2	4	5	6	.....	1	2	2	5	3	4	
4	3	3	5	2	.....	5	3	7	1	2	6	3	5	
5	6	5	6	3	8	4	7	6	4	9	6	4	6	
1	3	1	7	5	3	4	2	1	3	1	2	3	7	Deaths from seven principal Zymotic Diseases
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	
.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	1	.....	9	
.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	2	10	
1	.....	.....	3	2	1	1	.....	.....	.....	.....	.....	.....	11	
.....	2	1	1	1	.....	3	1	1	2	.....	1	.....	12	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	
.....	1	.....	1	1	.....	.....	.....	.....	1	1	.....	1	16	
4	2	2	3	2	2	5	3	2	2	2	7	3	17	Deaths from
6	2	6	2	4	1	1	3	4	4	3	3	3	18	
1	3	2	3	1	4	.....	2	6	1	2	3	2	19	
2	2	.....	.....	2	.....	1	1	..	1	1	1	2	20	
.....	3	3	3	2	5	1	2	4	2	3	3	2	21	
29.79	29.48	29.62	29.90	29.72	29.69	29.61	29.83	30.02	29.94	30.26	30.08	29.92	22	Mean Borom.
63.8	59.5	58.1	60.8	61.3	59.0	56.5	54.8	55.4	51.0	50.8	52.1	50.5	23	Mean Therm.
20.0	23.0	15.7	20.0	16.0	14.4	10.4	14.5	12.1	13.1	12.7	7.5	13.0	24	Mean Diurnal
53°	53°	53°	53°	58°	54°	54°	56°	55°	55°	53°	53°	53°	25	Mean height
59°	58°	58°	58°	54°	57°	56°	54°	54°	54°	53°	53°	52°	26	"
54.0	53.0	60.1	60.0	60.0	60.0	63.0	63.0	68.0	65.7	61.0	80.0	60.3	27	Mean moisture
0.09	0.26	1.30	1.86	0.80	0.33	0.64	0.27	0.72	0.26	0.0	0.36	0.21	28	Total Rainfall
S.W.	S.W.	S.W.	S.E.	S.E.	S.W.	W.	S.W.&E	S.W.	N.W.	S.W.	E.	N.E.	29	Prevailing
14	12	26	25	29	14	33	24	26	14	20	14	10	30	Velocity of Wind
114°	110°	114°	114°	114°	107°	108°	108°	97°	110°	98°	75°	93°	31	Highest recorded
80°	74°	69°	74°	73°	70°	67°	68°	69°	60°	60°	59°	60°	32	"
49°	45°	48°	50°	48°	46°	47°	42°	48°	41°	37°	42°	35°	33	Lowest
47°	44°	47°	49°	47°	45°	43°	40°	47°	40°	37°	40°	34°	34	"
19	15	28	23	19	17	22	23	23	12	16	14	11	35	New Cases of and Home Cases notified as clause 64, H ... Hudd. District
7	12	12	16	12	19	11	10	9	7	7	15	11	36	
1061	1042	1071	1081	1080	1055	1083	1099	1083	1091	1106	1080	1051	37	
24.36	14.83	20.13	18.01	20.13	24.89	18.54	21.72	21.19	19.60	23.30	14.30	15.36	38	Per 1000 of population
13.77	10.59	12.18	16.42	13.77	15.36	13.77	12.18	14.83	10.06	13.24	12.71	13.77	39	
0.53	1.59	0.53	3.71	2.65	1.59	2.12	1.06	0.53	1.59	0.53	1.06	1.59	40	Death-rate per 1000 lvg.
2.12	1.06	1.06	1.59	1.06	1.06	2.65	1.59	1.06	1.06	1.06	3.71	1.59	41	
16.08	15.86	16.62	17.01	17.24	17.60	17.59	16.81	15.22	15.27	15.86	15.74	16.08	42	Death-rate
28.40	29.56	29.99	29.82	31.08	27.08	32.47	30.00	31.70	29.06	30.45	29.11	29.35	43	Birth-rate

* Signifies Huddersfield had the lowest

X.—Continued.

52 weeks.		OCTOBER.					NOVEMBER.				DECEMBER.				TOTALS & AVERAGES
		40th week ended October 6, 1894	41st week ended October 13, 1894	42nd week ended October 20, 1894	43rd week ended October 27, 1894	44th week ended November 3, 1894	45th week ended November 10, 1894	46th week ended November 17, 1894	47th week ended November 24, 1894	48th week ended December 1, 1894	49th week ended December 8, 1894	50th week ended December 15, 1894	51st week ended December 22, 1894	52nd week ended December 29, 1894	
Births	1	55	33	37	35	46	45	35	39	45	44	37	28	31	1988
All Ages	2	34	29	34	36	35	25	22	31	26	50	34	27	30	1563
Under 1 year ...	3	10	8	3	10	5	3	6	9	4	10	13	12	6	318
to 5 years	4	4	4	5	5	6	2	4	3	3	11	1	5	4	184
10 to 60 years ...	5	4	.....	2	3	2	4	2	1	1	7	5	2	2	165
60 yrs. & upwards	6	12	7	11	7	8	6	6	3	8	12	8	5	7	397
Seven diseases ...	7	2	3	4	3	4	2	3	1	2	9	3	5	4	149
Smallpox	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Measles	9	1	.....	.....	.....	.....	.....	.....	.....	2	3	.....	.....	1	13
Scarlet Fever.....	10	1	.....	3	.....	2	.....	.....	.....	.....	1	.....	1	1	23
Diphtheria	11	.....	1	1	.....	.....	.....	1	1	.....	1	.....	.....	.....	27
Whooping Cough..	12	.....	.....	.....	1	.....	1	1	.....	.....	3	3	3	2	55
Contd. { Typhus..	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Fever { Typhoid..	14	.....	.....	.....	1	1	1	.....	.....	.....	1	.....	1	.....	11
Other &c..	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Diarrhoea	16	.....	2	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	18
Lung diseases, &c.	17	6	3	2	10	7	6	4	8	4	16	8	5	5	286
Consumption	18	1	2	5	2	6	3	1	4	4	4	4	1	3	171
Heart disease, &c.	19	3	3	5	5	2	1	1	3	3	4	3	.....	4	120
Violence, &c.....	20	2	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	2	38
Institutions	21	4	2	4	1	7	3	.....	2	3	5	1	2	.....	138
Baromet. (inches) ..	22	30.20	30.00	29.81	29.37	29.53	29.52	29.26	30.05	30.21	29.68	29.84	29.52	30.03	29.78
F.	23	47.6	54.2	44.0	43.9	45.5	47.5	42.3	43.2	41.0	36.5	44.3	41.3	41.1	47.6
Range ° F.	24	15.0	8.4	9.4	12.0	8.4	8.4	11.2	10.0	6.4	12.0	9.0	11.1	8.6	13.3
Earth Ther. 4ft. 6in	25	52°	52°	51°	50°	50°	47°	48°	48°	48°	47°	46°	45°	45°	47°
" " 2ft. 6in	26	51°	50°	49°	47°	47°	49°	49°	45°	45°	43°	44°	43°	43°	47°
Wet Air, %	27	69.0	79.0	71.0	77.0	76.0	70.0	76.0	76.0	76.0	76.0	77.7	78.0	75.4	67.0
(inches)	28	0.28	0.31	0.83	2.75	1.24	0.46	1.02	0.18	0.00	0.10	0.69	1.75	0.21	39.59
Wind	29	S.W.	S.W.	N.E.	N.E.	S.E.	S.W.	S.	S.W.	S.E.	S.W.	S.W.	W.	S.W.	
Miles per hour ...	30	12	16	16	40	32	29	32	41	12	10	35	70	60	27
Temp. in the sun	31	87°	33°	90°	80°	80°	83°	76°	69°	62°	54°	61°	62°	67°	92°
" " shade	32	57°	60°	50°	57°	60°	57°	53°	54°	50°	47°	53°	50°	49°	60°
" " night	33	33°	44°	34°	26°	34°	37°	35°	37°	31°	30°	33°	31°	30°	35°
" " grass	34	32°	40°	32°	25°	32°	36°	30°	33°	28°	26°	30°	26°	27°	33°
Sickn's. Paupers } Patients	35	10	14	17	13	23	22	21	19	30	25	26	23	12	983
Infectious under } Act	36	23	22	17	12	15	11	10	13	21	5	13	10	10	599
Paupers Relieved	37	1077	1099	1007	1101	1116	1107	1097	1119	1070	1084	1101	1108	1135	56543
Birth-rate	38	29.13	17.48	19.60	18.54	24.36	23.83	18.54	20.66	23.83	23.30	19.60	14.83	16.42	20.25
Death-rate	39	18.01	15.36	18.01	19.07	18.54	13.24	11.65	16.42	13.77	26.48	18.01	14.30	15.89	15.92
Seven Zymotics...	40	1.06	1.59	2.12	1.59	2.12	1.06	1.59	0.53	1.06	4.77	1.59	2.65	2.12	1.52
Breathing Organs	41	3.18	1.59	1.06	5.30	3.71	3.18	2.12	4.24	2.12	10.59	6.36	3.18	4.24	3.03
3 English towns..	42	15.97	16.69	16.99	18.53	17.34	16.90	17.10	17.30	17.81	20.24	19.75	18.20	18.03	18.13
" " "	43	30.15	29.23	30.46	29.59	32.63	32.58	31.24	32.86	31.71	31.53	32.19	30.96	24.55	30.75

death-rate of the 33 large towns.

TABLE B.—Part 1.

New Cases of Sickness occurring during the 52 weeks ended December 29th, 1894, amongst Out-door Paupers.

[illegible]

TABLE B, Part 2.

New Cases of Sickness occurring during the 52 weeks ended December 29th, 1894, amongst Home Patients and In-Patients of the Infirmary.

DISTRICTS OF BOROUGH.		Continued Fevers										In-Patients.										TOTALS.										
		Smallpox.	Measles and Rötheln.	Scarlet Fever	Diphtheria.	Croup.	Whooping Cough.	Typhus.	Typhoid.	Other, doubtful (Febricula, &c.)	Diarrhoea & Dysentery	Chicken Pox.	Rheumatic Fever.	Erysipelas.	Cancer.	Puerperal Fever.	Influenza.	Consumption.	Other diseases of Breathing Organs.	Diseases of the Heart, Liver, Kidney, Stomach & Bowels.	Convulsions and diseases of the Nervous System.	Violence, &c.	Immaturity and Old Age.	Other diseases.	Lead Poisoning.							
Home Patients	1	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	a	b	c	d	e	f	32						
	Central	Under 5 .....	...	17	...	1	...	17	...	...	...	2	...	...	...	...	...	...	...	42	12	5	...	17	...	114
	Portions of other Districts	Under 5 .....	...	7	...	1	...	4	...	3	...	3	...	34	2	...	...	1	20	83	46	7	...	82	6319				
		Under 5 .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	1	...	5
		Under 5 .....	...	...	...	...	...	...	...	...	...	...	...	...	2	1	...	1	5	9	4	2	...	3	...	27
In-Patients.	Central	Under 5 .....	...	...	...	...	...	...	...	...	...	...	...	7	...	...	...	...	1	18	2	...	...	...	...	2
	Marsh	Under 5 .....	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	3	...	3	...	...	2	...	2
	Fartown	Under 5	1	2	...	5	7	2					
	Deighton and Bradley	Under 5	2	3	2				
	Dalton	Under 5	1	2	...	2	15	3			
	Almondbury...	Under 5	1	2	...	1	...	20	17		
	Lockwood	Under 5	3	...	6	2	...	4	8		
	Lindley	Under 5	2	...	2	21	83	
	Longwood.....	Under 5	1	...	1	15
	Whole Borough	Under 5	17	1	...	1	...	17	2	43	14	9	3	27	134					
In-Patients from outside the Borough	Under 5	7	4	3	124	80	55	100	1	367	16	...	850					
	Under 5	79	41	12	31	...	86	261	

STREET LIST.

Arranged under the heading of each Infectious Disease.

Deaths which occurred at Birkby Hospital are allocated to the District from which the cases were notified.

PLACE OF DEATH.	DISTRICT.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhoea.
Newtown	Central					1			
Hardy's Buildings, South Street	"			1					
King Street	"								1
Bradford Road	"								1
Grove Street	"								1
John Street	"							1	
"	"				1				
"	"					1			
Dodd's Yard, Spring Street	"					1			
Mills Row, Castlegate	"						1		
York Street	"								1
Mills Row, Castlegate	"		1						
Windsor Court, Castlegate	"		1						
Back Dock Street	"							1	
Denton Lane	"					1			
Thomas Street	"					1			
St. Andrew's Road	"					1			
Firth Street	"					1			
High Street	"					1			
Upperhead Row	"							1	
Dale Street	"		1						
Charles Street	"								1
Back Spring Street	"					1			
Prospect Street	"							1	
Merton Street	"				1				
Colne Terrace, Aspley	"				1				
Water Street	"				1				
Lucas' Yard, Newtown	"								1
Portland Street	"					1			
New North Road... ..	"								1
Fitzwilliam Street West...	"								1
Birkby Fever Hospital	"			5				1	
" "	"								
Church Street, Paddock	Marsh								1
Johnny "Moor Hill," Paddock	"					2			
Tentergate, "	"					1			
Allen Row, "	"			1					
Upper Brow, "	"				1				
Mark Street, "	"								1
Clough Lane, "	"					1			

STREET LIST—CONTINUED.

PLACE OF DEATH.	DISTRICT.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhoea.
Hill Street	Marsh					1			
Gledholt Bank	"							1	
Birkby Fever Hospital	"			1					
Edgerton	"				1				
Fanny Row, Sheepridge	Fartown			1					
Marian Street	"				1				
Woodhouse Hill	"				1				
Woodhead's Buildings, Sheepridge	"				1				
Folly Road, Cowcliffe	"					1			
Long Hill	"					1			
Leeds Road North	"				2				
" " " "	"								1
Hillhouse Road	"				1				
Fartown Green	"								1
Lowerhouses	Almondbury				2				
Dog Kennel Bank	"		1						
Birkby Fever Hospital	"			1					
Close Hill, Newsome	"				1				
Taylor Hill	"				1				
Wood Terrace, Primrose Hill	"				1				
Dodds Royd, Berry Brow	"				1				
Somerset Road	"				1				
Newsome Road	"					1			
Deadmanstone, Berry Brow	"					2			
Stile Common	"					1			
Tunnacliffe Hill	"					1			
Lower Park	"					1			
Birch Street	"					1			
Prince Street, Primrose Hill	"					1			
Salford	"					2			
Arlom's Square, Newsome	"					1			
Church Terrace, Newsome	"					1			
Laithe Croft, Salford	"								1
Mulberry Street, Moldgreen	"								1
Scar	"							1	
Colne Bridge	Deighton & Bradley			1					
Birkby Fever Hospital	" "			2					
Cherry Nook	" "				2				
Deighton Road	" "					1			
Moldgreen	Dalton	1							
Ravensknowle	"	1							
Pond Cottage, Moldgreen	"	1							
Birkby Fever Hospital	"			2					
Forest Road	"			2					

STREET LIST—CONTINUED.

PLACE OF DEATH.	DISTRICT.	Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhoea.
Church Street, Moldgreen ...	Dalton ...	..				2			
Bradley Mills ... ..	" ..	...				1			
Highroyd, Moldgreen ...	" ...	...				1			
Victoria Street, Moldgreen ...	" ...	...				1			
Bankfield Terrace ... ..	" ...	...				1			
Bank End... ..	" ...	...				1			
Ravensknowle Road ... ..	" ...	...				1			
Lodge Row, Almondbury Bank	" ...	...				1			
Nab Hill ... ..	" ...	...						1	
Victoria Road	Lockwood...	...	1						
Bath Terrace ... ..	" ...	...	1						
Starling End ... ..	" ...	...				1			
Swan Lane ... ..	" ...	...			1				
Lockwood Road ... ..	" ...	...			1				
Bland Street ... ..	" ...	...			1				
Marsden Road, Crosland Moor...	" ...	...	1						
" "	" ...	.				1			
Park Road West, Crosland Moor	" ...	...	1						
Birkby Fever Hospital ... ..	" ...	...		4					
Bentley Street ... ..	" ...	...			1				
Thornton Road ... ..	" ...	...		1					
Albert Street ... ..	" ...	...				1			
Swan Lane ... ..	" ...	...				1			
Back Summer Street ..	" ...	...				1			
Woodfield Road ... ..	" ...	...				1			
Oldfield Square, Crosland Moor	" ...	...				1			
Hawthorn Terrace, "	" ...	...				1			
Moorfield Lodge, "	" ...	...				1			
Barton Road ... ..	" ...	...				1			
Bland Street ... ..	" ...	...						1	
Swan Lane ... ..	" ...	...						1	
Lockwood Road ... ..	" ...	...						1	
Victoria Street ... ..	" ...	...							1
Union Workhouse ... ..	" ...	...							1
Lindley Moor	Lindley ...	...				1			
Salendine Nook ... ..	" ...	...							1
Weather Hill Road ... ..	" ...	...		1					
New Hey Road ... ..	" ...	...		1					
Oakes ... ..	" ...	...				1			
Kew Hill	Longwood...	...				1			
" ... ..	" ...	...							1
Spark Hall ... ..	" ...	...		1					
Longwood... ..	" ...	...				1			
Lowergate ... ..	" ...	...				1			
High Street ... ..	" ...	...				1			
Mount ... ..	" ...	...			1				

Removal of Nuisances.

Yearly Report 1894, December 31st to December 29th.

			1st quarter	2nd quarter	3rd quarter	4th quarter	TOTALS
Drains requiring Re-construction (stone drains)	...	...	36	37	50	38	161
Do. do. (pipe drains)	...	...	3	3	10	2	18
Do. connecting with main sewer	...	...	50	7	6	6	69
Drains not efficiently trapped	...	...	52	47	45	45	189
Do. requiring Ventilation Shafts	...	...	21	21	27	22	91
Defective Sink Drains	...	...	62	50	65	54	231
Do. Yard Drains	...	...	35	38	15	35	123
Do. Cellar Drains	...	...	6	15	20	29	70
Do. Eave and Fall Pipes	...	...	18	23	19	31	91
Do. Street Gullies	...	...	13	2	1	9	25
Do. Roofing	...	...	3	1	2	4	10
Do. Urinals	...	...	...	4	2	6	12
Do. Baths	...	...	..	...	...	1	1
Do. Water Closets...	...	...	9	6	6	17	38
Sink Pipes, &c., requiring Disconnecting	...	...	91	54	76	81	302
To provide Sinkstones to Houses	...	...	2	4	13	...	19
Fall Pipes requiring Disconnecting	...	...	27	24	33	42	126
To provide Eave and Fall Pipes	...	...	42	17	5	5	69
Nuisances from want of Drains	...	...	9	4	8	8	29
Do. Water in Cellar	...	...	12	8	8	7	35
Do. Cellar Wells	...	...	...	1	...	...	1
Do. Cess Pools	...	...	1	1	2	2	6
Do. Stagnant Water	...	...	3	2	6	8	19
Do. Defective Paving of Yard	...	...	4	1	1	13	19
Do. Smoke	...	...	1	15	6	3	25
Do. Poultry and Pigeons	...	...	6	2	2	1	11
Do. Animals	...	...	2	4	2	2	10
Offensive Accumulations...	...	...	12	13	6	21	52
Do. Ashpits and Privies	...	...	1	14	2	6	23
Do. Swill Tubs	...	...	11	1	4	1	17
Urine Guards required	...	...	3	6	...	...	9
Closets requiring Lime-washing	...	...	3	4	10	...	17
Ashpits and Closets requiring Re-construction	...	...	10	9	16	16	51
Do. requiring proper doors and covering	...	...	24	25	8	10	67
Old Privies altered to tub or water closet system	...	...	25	27	19	7	78
Insufficient Closet Accommodation	...	...	10	15	5	2	32
Houses Overcrowded	...	...	3	2	...	3	8
Do. Requiring Cleansing	...	...	3	16	...	14	33
Do. Damp	...	...	9	...	2	...	11
Do. Requiring Water Supply	...	...	...	...	2	..	2
Cowsheds requiring Lime-washing	...	..	...	133	2	1	136
Do. Draining and Paving	...	..	...	2	...	...	2
Number of Wells abolished	...	...	...	...	...	1	1
TOTAL			622	658	506	553	2339

LOADS COLLECTED DURING THE YEAR 1894.

1894.	Ashes.	Street Sweepings.	Market Refuse.	Slaughter House Refuse.	Trade Refuse.	Snow.	Water from Mains.
January.....	3099	266	70	28	60	182	...
February	2753	315	49	22	48	22	...
March	2896	382	60	24	83	...	...
April	2875	326	57	19	89	...	125
May	3126	339	61	17	33	...	539
June	2623	273	60	20	35	...	1087
July	2418	260	58	21	36	...	602
August	2146	249	63	26	48	...	78
September	1802	243	59	28	18	...	138
October	4548	511	107	54	52	...	...
November	1931	305	60	24	26	...	...
December							
Total.....	30217	3469	704	283	528	204	2569

Particulars of Work Performed by Scavenging Staff at Hillhouse Depot, Streets, &c.

1894	Loads of Receptacles brought in to the Depot.	Number of hours worked by Sweeping Machine.	Refuse burnt in Hillhouse Destructor.		Tons of Clinkers removed from Hillhouse Destructor to tips.	Tons of fine ashes from Hillhouse Destructor made into manure.
			Loads.	Tons.		
January ...	1989	145	1258	1070	345	114
February ...	1735	131	1266	1076	304	209
March ...	1885	160	1376	1169	316	147
April ...	1750	153	1321	1122	321	95
May ...	1975	167	1634	1134	299	238
June ...	1904	164	1154	981	338	160
July ...	1920	132	1064	904	287	36
August ...	2001	157	365	310	66	179
September ...	1771	166	294	265	...	113
October ...	3913	324	562	406	107	35
November ...	1797	148½	220	184	14	14
December ...						
Year ...	22640	1847½	10514	8621	2397	1340

HILLHOUSE DEPOT, MANURE SALES 1894.

MONTHS.	Stable Manure.	Shoddy Manure.	Grass Manure.	Market Refuse.	Night- soil.	Slaugh- ter house Refuse.	TOTALS
1894							
January	81½	...	115	40½	114	34¾	385¾
February	98	16	130¾	58½	209	27	539¼
March	88½	40	171	40	147	17½	504
April	81	...	113½	47	95	39¾	376¼
May	82	32	20¾	39	238	33	444¾
June	77	32	...	32	160	8½	309½
July	61¼	...	...	37	36	32	166¼
August	58¼	8	116½	64	156	40½	443¼
September	57¾	20	98¾	41½	98	40	356
October	108	88	93¾	162	120	56	627¾
November ... }							
December	65½	16	97¾	39	57	16	291¼
Approximate Total ...	858¾	252	957¾	600½	1430	345	4444



INDEX TO CONTENTS.

	PAGE
Abattoirs	55
Accommodation for Infectious Cases	46
Bakehouses	57
Births	22
Canal Boat Acts, 1877 and 1884	59, 60
Classified Causes of Death Table VI., Appendix	31
Comparison of Quarters Tables I. V., Appendix	49
Comparative Mortality Table	10, 11
Do. do. 33 Large Towns	26
Congress—Sanitary Authorities on Vagrants	61
Do. British Institute of Public Health	62
Do. Sanitary Institute	65
Dairies and Cowsheds	55
Deaths, with Age Mortality	25, 29
Duties and Powers of the Sanitary Committee	2
Duties and Powers of the Health Committee	2
Food Supply	54
Health of Districts	8
Hospital	45, 47
Infantile Mortality	29, 30
Infectious Diseases	44
Introductory Review	5, 6, 7
Longwood—Sanitary Review	12, 21
Marriages	22
Meteorology—Abstract	50
Mortality from other diseases	41, 43
Notification Table	43
Offensive Trades	56
Population with Area	7
Removal of House Refuse	53
River Pollution	56
Sanitary Work—Summary	58
Scavenging	51
Seven Zymotic Diseases	32, 41
Smoke	56
Staff—Medical Officer of Health's Department	3
Statistical Summary	4
Tables in Appendix	
Workshops	51, 52



